

THE AMERICAN JOURNAL OF PHARMACY

JUNE, 1910

SUGGESTED U.S.P. TESTS FOR GLYCERIN.

By THOMAS M. STARKIE, Manager, William F. Jobbins, Incorporated.

The Food and Drugs Act having adopted the Pharmacopœia as the standard by which manufacturers must be governed, it is desirable and necessary that the Pharmacopœia requirements should specify such definite, fixed limits of impurities, and tests for determination thereof, as will avoid the possibility of contention between pharmacists and chemists, and in the commercial world, and the attention of the members of the Committee of Revision, meeting in Washington this month, is invited to the subject of Glycerin.

Many of the tests set forth in the Pharmacopœia, official at the present time, are indefinite and unreliable, and allow of so much possibility of contention, particularly by some pedantic analyst, that any glycerin could be claimed as failing to meet the requirements of the Pharmacopœia. It has been contended that in a general way the tests as given in the present Pharmacopœia will, in the hands of an intelligent analyst, enable him to distinguish between a pure and an impure glycerin. Experience over a great many years in the glycerin business has shown that even the most intelligent and careful analysts will differ regarding the Pharmacopœia tests for glycerin.

Tests involving mixing with concentrated sulphuric acid, and heating glycerin with sulphuric acid and alcohol, should be abandoned, inasmuch as they lead to varying results in different hands, and even when carried out with the greatest care may lead to wrong conclusions, and, also, such tests show no more than can

be determined with greater definiteness from tests exactly stated. Tests involving treating glycerin with ammonia and silver salts, or with ammoniacal silver salts, and requiring heating with alkaline copper solutions, are unreliable, and likely to give erratic results in the hands of different analysts, and should be abandoned. Such requirements should obtain that will insure a quality of glycerin with only innocuous limits of impurities, and such as is contemplated by the Food and Drugs Act, and the necessary tests for the determination of the purity of glycerin should be set forth in such language that there can be no erroneous conclusions, regardless of the measure of intelligence of the analyst, conceding always, of course, that the analyst must necessarily have such knowledge and ability in chemistry to make the tests. The requirements also should be such as will avoid any possibility of advantage to any dishonest refiner, by reason of tests that permit of any controversy or contention as to the meaning thereof.

With such purpose in view it is suggested that taste and odor tests be eliminated, since two different individuals' senses of taste or smell are almost invariably widely different, one chemist sometimes being of the opinion that there is a foreign taste or smell, while another equally careful and exacting chemist can detect neither, resulting in contention.

Specifications are herewith submitted as requirements covering all possible impurities to be found in chemically pure glycerin:

Specific gravity, not less than 1.249 at 25° C. (= 95 per cent. glycerin). Factor of .00061 to be added for each degree of temperature below 25° C., between 15° and 25° C., at which gravity is determined. The gravity to be ascertained by picnometer, or by means of an accurate plummet (as employed with a Westphal specific gravity balance), suspended from the arm of an analytical balance sensitive to one-tenth milligramme.

Carbonaceous residue, including mineral and carbonized organic impurities, not to exceed .01 per cent. Test: weigh 50 grammes of glycerin in a tared platinum dish, heat cautiously until it inflames upon direct application of fire (say from lighted match), then remove the source of heat (preferably Bunsen burner), and allow the glycerin to burn away in a place free from draught; transfer the dish to a desiccator, and weigh when cold.

Ash, including chlorides, not to exceed .007 per cent. Test: incinerate the carbonaceous residue at a dull red heat until carbon

is entirely burned off; then transfer to a desiccator, and weigh when cold.

Chlorides, not to exceed .001 per cent., figured as NaCl. Test: put the ash in 100 c.c. distilled water, add 2 or 3 drops of a cold, saturated solution of neutral chromate of potassium (K_2CrO_4) as indicator; then run in, from accurately calibrated burette, N/100 silver nitrate volumetric solution till tinge of permanent red color appears; the c.c. of N/100 silver nitrate volumetric solution used, multiplied by .0005806 for each c.c., and then by 2, giving the percentage of chlorine as sodium chloride.

Total acid equivalent, in terms of NaOH, not to exceed .02 per cent. Test: weigh 100 grammes of the glycerin, and dissolve in 100 c.c. of distilled water. Use phenolphthalein solution as indicator. Run in 10 c.c. of N/10 NaOH solution (3.976 grammes of NaOH to 1 litre) from a burette, heat to boiling over Bunsen burner, and continue boiling for three or four minutes, then titrate with N/10 H_2SO_4 solution (4.8675 grammes per litre) run in from a burette, until pink color just disappears. The NaOH solution used, less the H_2SO_4 solution used, must not exceed 6 c.c. to neutralize.

Arsenic not to exceed 1 part in 100,000; to be determined by the Gutzeit test, and 5 c.c. of a 1-in-10 aqueous solution of the glycerin placed in a narrow-necked flask with 2 grammes of zinc, 20 c.c. of hydrochloric acid (22.5 c.c. concentrated and 77.5 c.c. water). The flask is closed by a filter paper saturated with alcoholic solution of mercuric chloride, and dried. The neck of the flask contains a roll of cheese cloth impregnated with 10 per cent. lead acetate, to prevent any hydrogen sulphide from reaching the sensitive paper. The flask, 60-75 c.c., should have a narrow neck, and the circle of paper exposed should be about 1 cm. in diameter. The action is allowed to continue until the greater part of the zinc is dissolved, and at that time the paper should not be stained a distinct yellow or orange.

Silver nitrate test: An aqueous solution (2 c.c. of glycerin to 10 c.c. of distilled water), with 5 c.c. of N/10 silver nitrate solution; the mixture shaken and placed in a dark place for 10 minutes may assume a slight pink or gray tinge, but must not turn red nor black, nor give a precipitate (limit of chlorides and impurities having reducing properties).

Glycerin conforming to the above tests will insure such purity

as is necessary and desirable, and applicable for use in medicines, foods, or drugs, and are requirements which no honest refiner of glycerin can reasonably make objection to.

The question of sugar adulteration was investigated about three years ago by the United States Department of Agriculture, prompted by the assertion that no American glycerin was obtainable that would not reduce Fehling's solution. The investigation led to finding that the glycerin of reputable American refiners did not reduce Fehling's solution. Sugar adulteration of glycerin, however, has long since ceased to be practised, and the test with Fehling's solution is no longer employed, as sugar, if present, would increase the carbonaceous residue, and is, therefore, covered by the definite, fixed limits of carbonaceous residue in the proposed requirements.

PROGRESS IN PHARMACY.

A QUARTERLY REVIEW OF SOME OF THE MORE INTERESTING LITERATURE
RELATING TO PHARMACY AND MATERIA MEDICA.

By M. I. WILBERT, Washington, D. C.

Pharmaceutical history has been materially augmented by the recent happenings, both in this country, as well as abroad, though the observer would be rash, indeed, who would attempt, at this early date, to designate which of the several happenings is destined to have the more far reaching influence on the progress of pharmacy at large.

The annual meeting of the American Pharmaceutical Association, coming, as it did, immediately before the decennial meeting of the U. S. Pharmacopœial Convention, was unusually well attended and the members present appeared to take more than ordinary interest in the program that had been provided for their consideration. The general meetings of the Association as well as all of the sessions of the several sections were well attended, the papers presented were both numerous and meritorious and the discussions were, usually, much more interesting, certainly more comprehensive, than in former years.

Pharmacopœial revision was freely discussed both in and out of meeting and at least several of the features of the meeting, in this connection, were unusually interesting and will undoubtedly

prove to be of value in the coming revision of the Pharmacopœia of the United States.

Among the more interesting features, bearing upon the revision of the Pharmacopœia, were the discussion of the report of the A. Ph. A. Committee on the U.S.P. in the Section on Scientific papers and the symposium on foreign pharmacopœias in the Section on Practical Pharmacy and Dispensing.

These two events will probably be recognized by those present as being the more interesting, certainly the more influential, events of the week and it is unfortunate indeed that it will be impossible to reflect, in the printed report of the proceedings, the spirit and the earnestness manifested by those taking an active part in the discussion.

The United States Pharmacopœial Convention, held in Washington, May 10, 11, and 12, 1910, will undoubtedly be recorded in history as the beginning of a new era in matters pharmacopœial though the ultimate outcome, at the present time, is quite problematical.

It is perhaps unfortunate that the general medical practitioner and the teachers of clinical medicine and applied therapeutics in medical schools are not more liberally represented on the General Committee of Revision, though on the other hand it is a matter for congratulation to note that the new thought in pharmacal therapy, as represented by experimental pharmacology, is well represented; no less than six members of the General Committee of Revision being directly interested in this line of work.

Altogether it is fair to assert that the General Committee of Revision, despite the hit or miss fashion in which it was necessarily selected, is unusually well balanced and is fully representative of the interest manifested by the members or delegates present.

Forecasting the possible outcome of the present revision an article on the U.S.P. (*Drug. Circ.*, 1910, w. 54, p. 224) concludes:

"It would appear that we have once more come to the parting of the ways, and that the delegates gathered at the decennial meeting of the United States Pharmacopœial Convention, on May 10th of this year, must decide whether or not the United States Pharmacopœia IX is to reflect the bright light of the morrow or the dim after-glow of the waning day. In other words, they must decide between the acceptance of knowledge, science and truth, or the retention of speculation, empiricism, and self-de-

ception; between a pharmacopœia for the future along the lines laid down by the originators of the American Pharmacopœia, or a book of standards for the thousand and one articles that have been and are being used as medicine without any definite knowledge of how or why. . . . Which will it be, a repetition of the stagnation evidenced in 1870, or of the progress recorded in 1880? The delegates present at the convention will decide, and the people at large will be benefited or injured by their decision to the extent to which it will foster or retard progress in the science of medicine."

An editorial in the *New York Medical Journal* (May 14, 1910, p. 1020) commenting on the Pharmacopœial Convention, says in part:

"The only important difference of opinion which arose in the Convention was regarding the scope of the Pharmacopœia. In discussing the principles laid down by the Convention for the guidance of the Committee of Revision some of the members of the Convention desired to limit the scope of the Pharmacopœia so as to make it available as a text book, while others wished to widen its scope so as to include all medicinal substances in general use, whether of approved therapeutic value or not. While the recommendation to the Committee of Revision was general in character, its purport was in favor of widening of the scope. The Convention took the ground that the extent to which a drug was used was a safer criterion of its availability for introduction into the Pharmacopœia than the expression of expert opinion regarding its therapeutic value. Consequently the use rather than the therapeutic value of a drug will be taken as a guide by the committee regarding admissions and deletions.

"The election of Dr. Harvey W. Wiley, chief of the Bureau of Chemistry of the United States Department of Agriculture, and charged in his official capacity with the enforcement of the Food and Drugs Act, to the presidency of the Convention gives assurance of complete harmony between the Government and the Committee of Revision. The substitution in this office of a chemist and government official for a physician and therapist may be taken as indicative of the change in the status of the Pharmacopœia from that of a purely academic pronouncement to a book of legal standards."

The general principles adopted by the Convention for the guidance of the Committee of Revision are well worthy careful

consideration on the part of those interested in the revision of the Pharmacopœia and to many at least these general principles would appear to leave the responsibility for the scope and content of the Pharmacopœia as well as many of the details of the revision entirely with the Committee of Revision.

One of the more important of these principles, No. 14, refers to publicity and recommends that: The general Committee of Revision be authorized to make public for comment and criticism an abstract of standards and tests before final adoption.

The value of preliminary publication of proposed pharmacopœial standards is well illustrated by the discussion that has been aroused in German and English Pharmaceutical Journals, through the preliminary publication of proposed changes in the German and British Pharmacopœias. In Great Britain the publication of the monographs proposed for the Ph. Brit. V. has been followed by a full and free discussion of the several proposed requirements and the resulting information that has been offered will, no doubt, be of advantage to the editors of this particular portion of the Ph. Brit.

An editorial (*Chem. & Drug.*, Lond., 1910, March 26, p. 64) in discussing the prior publication of the proposed pharmacopœial monograph for essential oils points out that this is the first time that this course has been attempted in connection with the Ph. Brit., and commends the move as being one in the right direction, despite the fact that it still remains to be proved how far the new method will meet the wants of the case. There can be no two opinions about the fact that it is a rational experiment devised for the good of all interested.

Ph. Germ. V.—A list of the proposed changes to be made in the German Pharmacopœia is published in the *Pharm. Zeitg.* (1910, v. 55, p. 177). The changes include admissions, deletions, changes in the Latin title, and a number of changes in the requirements for the several articles.

An editorial (*Pharm. Zeitg.*, Berlin, 1910, v. 55, p. 269) commenting on the changes proposed for the new edition of the German Pharmacopœia, points out that the proposed additions include 63 separate titles and 12 general headings. Among these 63 titles are 17 substitute preparations, 2 new oils, and 5 new drugs. The number of articles proposed for deletion amounts to 32, so that the new Pharmacopœia will include in round numbers

40 additional titles. Even with this addition the German Pharmacopœia will contain fewer medicaments than the majority of other foreign pharmacopœias. This is considered as evidence of the scientific development of medicine in Germany.

The following titles proposed for the corresponding trade names will illustrate the difficulties that confront the prospective user of the Ph. Germ. V.:

Paraminobenzoyldiaethylaminoethanolum hydrochloricum.....	Novocaine
Benzoylaethyldimethylaminopropanolum hydrochloricum.....	Stovaine
Tropacocainum hydrochloricum.....	Tropacocaine
Trimethylbenzoxypiperidinum hydrochloricum.....	B. Eucaine
Aethylmorphinum hydrochloricum.....	Dionin
Diacetylmorphinum hydrochloricum.....	Heroin
Acidum acetylo-salicylicum.....	Aspirin
Pyrazolonum phenyldimethylicum salicylicum.....	Salipyrine
Pyrazolonum dimethylaminophenyldimethylicum.....	Pyramidon
Natrium Arsanilicum	Atoxyl

Some criticism has been aroused in Germany by the proposed use of the full chemical name for the new additions to the German Pharmacopœia. It is proposed, for instance, that in place of the chemical name for novocaine the name aethamin be used, and for stovaine the name propamin (*Pharm. Ztg.*, Berlin, 1910, v. 55, p. 270).

J. Prescher, in a communication to *Pharm. Zentralh.*, 1910, v. 51, p. 288, discusses the nomenclature of the haloid salts of sodium, ammonium, calcium and magnesium in the Ph. Germ., and points out that "chloratum" has been and is likely to continue to be mistaken for the designation frequently used for the "ic" salts of the same elements.

NEW ITALIAN PHARMACOPŒIA.—An editorial (*Chem. & Drug.*, London, 1910, Feb. 26, p. 327) commenting on the new Italian Pharmacopœia, shows that in certain directions tests are adapted to the requirements of the average pharmacist rather than to please the analytical specialist.

SERVIAN PHARMACOPŒIA.—The recently published "Pharmacopœia Serbica, Editio secunda," embodies several interesting innovations. To overcome the criticism that deleted articles are no longer subject to any official requirements it is provided that when an article not official in the second edition but described in the first edition of the Servian Pharmacopœia is prescribed by a

physician the article, as dispensed, must comply with the requirements laid down in the former edition of the Pharmacopœia. The provisions of the Brussels Conference are closely adhered to. Physical and chemical tests have been added. Patented chemicals are introduced and described under their chemical titles (*Pharm. Post*, 1910, v. 43, p. 169).

PHARMACOPŒIAL COMMENTS.—The following abstract from an editorial (*Pharm. J.*, London, 1910, v. 30, p. 510) serves as an illustration of the interest taken abroad in every thing pertaining to pharmacopœial revision:

"As an example of thoroughness in the department to which it specially applies Bulletin No. 58 of the Hygienic Laboratory of the United States is probably unequalled anywhere. . . . Even a casual perusal of this volume will quickly convince the reader that 'a maximum amount of disinterested information' has been collocated in a manner which may well serve as an example to older countries. The status of the U.S.P. as the official standard for determining the purity and strength of widely used medicaments could not be maintained on better material than is to be found in this digest, for the compilation of which the pharmaceutical and chemical literature of the whole civilized world has been ransacked in a way which, one is almost compelled to think, can only be done in America. The compilers having hit upon what is undoubtedly the right way to go about it, have apparently left no leaf unturned in their efforts to find material which in any way dealt critically with official articles. . . . International standards are fully considered in twenty-two pages, while the remaining 411 pages are taken up with comments on official articles drawn from all available sources, and which for the most part constitute the material with which the compilers may make or mar their National Pharmacopœia."

INTERNATIONAL CONGRESS.—The International Pharmaceutical Congress, to be held in Brussels from September 1 to 5, 1910, is attracting considerable attention abroad, particularly in Germany and France.

At a recent meeting of the German Pharmaceutical Society, held in Berlin, the several propositions that have been submitted were discussed at some length. The desirability of greater uniformity in the strength of test solutions and in the method of

using them as directed in the several pharmacopœias was particularly emphasized.

ALKALOIDAL CONTENT OF SOLANACEOUS PLANTS.—T. Chevalier (*Comptes rend*, 1910, v. 150, p. 344) points out that the generally accepted statement that wild belladonna is richer in total alkaloid than the cultivated plant would appear to require modification. A series of cultural experiments show that by employing the right manure the proportion of alkaloids in the leaves of solanaceous plants may be more than doubled.

APOMORPHINE HYDROCHLORIDE.—An abstract from articles by E. Harnack, H. Hildebrandt and others shows that a trade preparation sold as apomorphine hydrochloride contained from 66 to 75 per cent. of trimorphine hydrochloride, which has a different physiological action to apomorphine. It is generally known that apomorphine and trimorphine hydrochloride cannot be sharply separated by salting out with hydrochloric acid. The presence of large quantities of trimorphine hydrochloride, however, is thought to be objectionable (*The Pharm. J. and Pharmacist*, London, 1910, 545).

BORIC ACID, AS A FOOD PRESERVATIVE.—The conclusions which Dr. Julius Bernstein, bacteriologist to the City of Westminster, draws from a series of experiments directed to find out the effect of boric acid on foods are worthy of attention. He finds that boric acid to the extent of 20 grains to the pound prevents objective decomposition, such as is detectable by smell. If objective putrefaction has commenced, it inhibits further changes of this kind, possibly leading to diminution in the smell. It has a marked selective activity on the various organisms, inhibiting the growth of yeasts and organisms of the *proteus* group, and possibly other harmless saprophytes, though not the organisms of the *coli* group. (*The Pharm. J. and Pharmacist*, London, 1910, p. 509).

BUCHU LEAVES.—A correspondent discusses the collection and marketing of buchu leaves in Cape Colony and points out that the genus *Barosma* is peculiar to the Cape, as many as eight varieties having been classified. Of these, 3 are considered of medicinal value in Europe, although in Cape Colony many other varieties are used in domestic medicine. *Barosma betulina*, the official variety, is the one chiefly collected, as it commands much higher prices, as does *B. serratifolia*. In this connection it is interesting to note that 20 years ago the value of these two

varieties was reversed. The correspondent also points out that the buchu market in London mainly depends on the American demand (*Chem. & Drug.*, London, 1910, March 5, p. 338).

COTO BARK.—An editorial in the *British Pharmaceutical Journal*, 1910, v. 30, p. 231, asserts that true coto bark has long been unobtainable in commerce, and it is generally understood that the article now in use is paracoto bark, which possesses similar properties, though not yielding identical chemical products. But even the paracoto bark has recently become scarce, and there are at present two false barks in commerce, which differ essentially from the genuine coto.

CINCHONA ASSAY.—Bernard F. Howard, commenting on a recent paper by Engelhardt and Jones who assert that "in most of the cinchona barks the relation of the percentages of the four principle alkaloids of the drug is almost constant," expresses the belief that there is an immense variation in the proportions of the four common alkaloids in different samples of cinchona bark. This is, perhaps, best illustrated by the fact that a considerable number of well known Dutch analysts in Amsterdam publish about once a month an official list of analyses of samples of bark up for sale, and a study of these analyses will show at once not only a great variation in the percentage of total alkaloids in various samples of barks but also great differences in the proportion of quinine present to cinchonidine, cinchonine, and quinidine (*The Pharm. J.*, London, 1910, p. 504).

COD LIVER OIL.—An editorial discusses the economic conditions prevailing in the cod liver oil market and points out that the price of Norwegian cod-liver oil has appreciated more than 25 per cent., as Lofoten fishing has proved very irregular, and although the number of fish caught was quite up to the figures of the previous year, the production of medicinal cod-liver oil is 3,756 barrels or 4,357 hectolitres less. The general opinion in Norway is that the livers will be leaner next season (*Chem. & Drug.*, London, 1910, March 26, p. 62).

ERGOT.—An abstract from an article by A. T. Livingstone (*Med. Rec.*, Jan. 29, 1910, through *B. J. M.*) points out that the peculiar province of ergot is to stimulate diseased rather than normal unstripped muscle. However contrary to previous knowledge of ergot, it is practically true that it acts on the diseased organs better than on normal ones containing unstripped muscle fibres. The author

has never found any bad effects from the use of large doses of ergot. He prefers the less refined preparations, since some principle seems to be removed by standardization (*The Pharm. J. and Pharmacist*, London, 1910, p. 496).

MUCILAGE OF ACACIA.—A correspondent calls attention to the need for preserving mucilage of acacia and asserts that the addition of 10 per cent. of alcohol will serve as an efficient and unobjectionable preservative (*Pharm. Ztg.*, Berlin, 1910, v. 55, p. 232).

NUX VOMICA.—Planchon and Tuillet (*Répert. Pharm.*, 1910, v. 22, p. 97) discuss the identity of "Corozo" which has frequently been found as an adulterant of powdered nux vomica. They point out that large and increasing quantities of so-called Australian corozo are now imported into Hamburg.

OPIUM.—Frank Browne discusses the nature and composition of the several varieties of opium and the methods of consuming the drug and its several preparations (*Pharm. J.*, London, 1910, v. 30, pp. 452-453).

THE SUSCEPTIBILITY OF CHILDREN TO OPIUM.—A recent editorial, in the *British Pharmaceutical Journal*, 1910, v. 30, p. 230, discusses the general belief that children are more susceptible than adults to the toxic effects of opium; it is pointed out that children respond as readily as adults to the therapeutic action of opium, and are really less susceptible to its toxic effects.

STERILIZING AMPOULES.—Baroni considers that steam at 112° C. is indispensable for effective sterilization of ampoules. In the case of adrenalin chloride and eserine salicylate a tint sometimes develops owing to the presence of an air-space in the ampoule. This has been obviated by filling the space with a harmless gas, such as carbon dioxide, but the apparatus required is somewhat more complicated than is needed for filling ampoules in the ordinary way (*Chem. & Drug.*, London, 1910, March 26, p. 68).

STANDARDS FOR BRANDY, WHISKY, AND RUM.—Regulations that have been made by the Governor-in-Council and published in the *Hong Kong Government Gazette*, providing standards for brandy, whisky, and spirit, define brandy as a spirituous liquid distilled from the wine of grapes, and "Cognac" as brandy made in the Cognac region from grapes grown therein. Whisky is defined as a spirit obtained by distillation from a mash of cereal grains saccharified by diastase of malt. Rum is defined as a spirit distilled direct

from sugar-cane products in sugar-cane growing countries (*Pharm. J.*, London, 1910, v. 30, p. 422).

TINCTURE OF IODINE.—C. Courtot (*Journ. de Pharm. et de Chim.*, 1010, Nr. 67) presents a study of the changes that take place in tincture of iodine and concludes that the products formed are hydriodic acid, acetaldehyde and acetic ether. The reactions taking place he outlines as follows: Through the action of iodine on alcohol hydriodic acid and acetaldehyde are produced; the latter is decomposed by iodine in the presence of water to acetic acid, which, reacting on the alcohol, produces acetic ether (*Pharm. Ztg.*, Berlin, 1910, v. 55, p. 346).

VOLATILE OILS.—Hill and Umney present a number of monographs for volatile oils which it is proposed to submit for inclusion in the coming edition of the British Pharmacopœia (*Pharm. J.*, London, 1910, v. 30, pp. 177-181).

The Chemist and Druggist (1910, March 12, pp. 94-96) presents a comprehensive comparative table of data on essential oils as propounded by different authors, British Pharmacopœia, Squire's Companion, Hill and Umney, Parry's Essential Oils, and others, the object being to show at a glance the points upon which there is agreement and disagreement.

AMENYL.—Amenyl is the hydrochloride of methylhydrostimide and occurs as yellowish needle shaped crystals melting at 227° C., and readily soluble in warm water (*Pharm. Post*, 1910, v. 43, p. 293).

ARYLARSONATES.—J. Ernest Lane calls renewed attention to the possible untoward effect resulting from the use of such preparations as atoxyl, orsudan, and soamin. He reports a case of optic atrophy and complete blindness following the use of orsudan in a case of syphilis. Also calls attention to three cases, which recently came under his notice, in which blindness was caused by soamin (*Brit. Med. Journ.*, 1910, v. 1, p. 599).

THE DANGERS OF ORSUDAN AND SOAMIN.—An editorial in the *Pharmaceutical Journal*, 1910, v. 30, p. 387, calls attention to the numerous reports that have been published recently on the possible dangers that might accrue from the use of orsudan and soamin.

CETHAL.—Cethal is cinnamylmethyl with 10 per cent. of thymol. Used for the treatment of pulmonary affections; to be inhaled by means of a special apparatus (*Chem. & Drug.*, London, April 2, 1910, p. 44.)

NEOPYRIN.—Neopyrin is valerylamido antipyrine and occurs as white nearly odorless crystals that are but slightly soluble in water. The substance melts at 103° C. and has a bitter, quinine-like taste. On boiling with alkali or dilute acid neopyrin is split into amidoantipyrine and isovalerianic acid (*Pharm. Post*, 1910, v. 43, p. 293).

PHENOL, ANTIDOTAL EFFECTS OF ALCOHOL UPON.—Novack (*Monthly Ency. and Med. Bull.*, Aug., 1909, v. 42, p. 1132) presents the following conclusions drawn from an investigation on the antidotal effects of alcohol upon phenol: (1) The peculiar phenomena by reason of which alcohol has been acclaimed an antidote to phenol are the result of its solvent and repellent properties and not of any chemical antagonism. (2) Phenol, or carbolic acid, although it is a powerful corrosive, limits its destructive progress by the formation of an albuminous coagulum. (3) Alcohol is of great value externally when used early, but when used late the destruction of tissue is not prevented, although the appearance is better. (4) On account of the repellent and solvent properties of alcohol it is dangerous to be left in the stomach together with the phenol. (5) The advised treatment is first lavage with some solution as the magnesium-sulphate-albumin mixture, followed by lavage with a solution of alcohol as a clearing agent (*Pharm. J.*, London, 1910, v. 30, p. 268).

PROTARGOL.—F. Goldmann, in discussing the dispensing of protargol, warns against the use of glycerin to facilitate solution and asserts that glycerin is not only objectionable but also unnecessary. He points out that an aqueous solution of protargol can readily be prepared by sprinkling the substance on the surface of the distilled water and allowing to stand for a few moments. He concludes that solutions of protargol should be freshly prepared, should contain no glycerin and should not be prepared by the aid of heat (*Apoth. Ztg.*, Berlin, 1910, v. 25, p. 274).

U. S. PHARMACOPŒIAL CONVENTION OF 1910.

The ninth decennial U. S. Pharmacopæial Convention convened on the morning of May 10 in the large auditorium of the New Willard Hotel, Washington, D. C. It was a gathering representative of the varied interests in the professions of medicine and pharmacy and the drug trade as well.

The Convention was called to order by Prof. Otto A. Wall, the Second Vice-President, upon whom devolved the duties as presiding officer owing to the illness of the President, Dr. H. C. Wood, and the death of the First Vice-President, Prof. A. B. Prescott.

Nearly every one present recognized that the deliberations of the few days furnished an opportunity for the expression of opinions, which would not recur again for ten years. Delegates and alternates representing 158 institutions—80 medical and 78 pharmaceutical and chemical organizations—were in attendance. The total number of 311 accredited delegates, included 140 medical and 171 pharmaceutical and chemical representatives. While there may be some question as to the limit and scope of the U. S. Pharmacopœia it is quite certain that the principle of general use of an article will not be the sole criterion for its admission. The last ten years have seen the recognition of a principle that is surely in the direction of progress. Ten years ago the President of the Convention stated that "if powdered brickdust was employed by the medical profession then it should be admitted into the Pharmacopœia." At the Convention of 1910 the principle was discussed that not only must a substance be in general use, but that it must also have some value as a remedial agent in order to be admitted into the Pharmacopœia. After having been acceded to by a good majority this principle was subsequently, on motion of Dr. Solis Cohen and without any additional discussion, eliminated and we believe that this was due to a misunderstanding of the purport of the recommendation from the outgoing Committee of Revision.

The address of welcome by Secretary Charles Nagel of the Department of Commerce and Labor was appropriate and indirectly suggestive of the motive and spirit which should dominate the deliberations of a convention which concerns the protection of the

public health. He said that there must be co-operation of the representatives of industry, commerce and government; that the delegates were assembled to consult and confer in order that they might develop their professional work; and that in the elevation of standards which are intended for the protection of the public health and which are to be adopted by the Government, it is desirable that this be done in such a manner that commerce is not interfered with and no new regulations are required for their enforcement.

The address of His Excellency Senor Calvo, the minister to the United States from Costa Rica was suggestive of the opportunity afforded the convention to make the U. S. P. an American Pharmacopœia. He stated that the Spanish American population amounted to 40,000,000 people. He also referred to the fact that the U. S. Pharmacopœia is one of the recognized pharmacopœias official in Costa Rica and in several of the States of South America.

The address of President Wood was then read by Dr. Wall. It was in printed form and copies were distributed to the delegates. As the address was being read no doubt those who had intimately known Dr. Wood and were present at the 1900 Convention thought of him and saw him as he was then, the ablest exponent of the medical profession and as the leader and most magnetic personality of that convention. The present address revealed the character that has been shown in all of the papers of Dr. Wood during the past fifty years and is a fitting close to a life of over-strenuous labor in the interest of the professions of medicine and pharmacy, he being as well known to the pharmacists of the United States, and indeed throughout the world, as he is to the medical profession.

From the address the following paragraphs are selected as having a bearing on the future work of revision:

The position of the Convention is so anomalous that a parallel is very difficult to find, but the lighting and buoying of the English coast is under the control of a Corporation which is analogous to the U. S. Pharmacopœial Convention in that it exercises legal governmental authority although an independent body. Its power to erect and take charge of the light-houses and beacons of the coast of England was given to it by Queen Elizabeth in 1573, and its work has been so satisfactory that whilst the coasts of Scotland and Ireland are under government care, the Brothers of the Trinity still remain masters of the English coast.

As it was with the Corporation of Trinity House, so originated in

the early days of the American Republic, not by law but by voluntary action and consent, the Convention of the U. S. Pharmacopœia; but to-day, incorporated and its actions legalized, it constitutes the power which regulates the relations between the professions of pharmacy and medicine, and gives the standard of legal purity for certain substances used widely for other than medical intent.

The Corporation of Trinity House has maintained its supremacy and the character of its work by its conservatism, and by its refusal to widen the circle of the Executive or the character of its membership. As with it so do I believe that the U. S. Pharmacopœial Convention will, to the great benefit of the professions of pharmacy and medicine and of the people of the United States, maintain its own existence by conservatism, by guarding well the portal of entrance to the Convention, and by making scientific and practical fitness rather than geographic representation the requirements for membership, especially in its Executive.

President Wood also referred to the fact that as the Spanish translation of the U. S. Pharmacopœia had become the official Pharmacopœia of Cuba, he believed that the University of Havana should be given the inherent right to send a delegate or delegates to the Convention, because to the University of Havana we ought to look for the translation of the Pharmacopœia into the Spanish language. This recommendation was subsequently approved by the Convention. During the reading of the address there was present upon the platform Dr. José Guillermo Diaz, of the University of Havana, who translated the U. S. Pharmacopœia into Spanish and to whom in large part is due the popularization of the Spanish edition. Dr. Diaz was later introduced to the Convention and he and his colleagues Dr. Juan Guiteras and Dr. José Alacan also Professors in the University of Havana were extended the privileges of the floor.

One other matter might be mentioned which was considered by President Wood in his address. He says:

In 1902, your President and Dr. Frederick B. Power, Ph.D., an American chemist, Director of the Wellcome Chemical Research Laboratories of London, were appointed by the Secretary of the Interior as delegates to represent the U. S. Government in the International Conference for the Unification of the Formulæ of Heroic Medicines, which had been called by the Belgian Government and which met in Brussels in September, 1902. Although attempts had been made before to obtain such unification, and failed, this Conference fully achieved the object for which it was summoned, namely—the making of a list of drugs which were considered actively remedial and yet capable of doing great harm, with a list of preparations and their strength; so that the traveller can, when the work of the Conference has been accepted by the various nations individually, have a

prescription compounded of the same strength in any city of a Nation party to the Conference. The Committee on Revision of the U. S. Pharmacopœial Convention has in great measure conformed to the recommendation of the meeting at Brussels. The failure to do so completely seems to me the one blot on their work.

Nov. 11th, 1908, I received from the Acting Secretary of State a translation copy of a letter from the Belgian Legation concerning the creation of a permanent institution, to be called the International Secretariate for the Unification of Pharmacopœias, located at Brussels, its expenses to be paid by annual quotas from the adhering nations. In reply, I wrote to the Hon. Robert Bacon that such a Secretariate seemed to me so foreign to the immediate objects of the U. S. Pharmacopœial Convention, and so open to the possibilities of serious pecuniary responsibilities, that I personally could not endorse it, but would refer the matter to the U. S. Pharmacopœial Convention of 1910. I have heard nothing further concerning this subject, and have transferred all my correspondence to Dr. Murray G. Motter, Secretary of the U. S. Pharmacopœial Convention. With this information I leave this subject to be decided as may be thought fit by you.

The address of Professor Joseph P. Remington, Chairman of the Revision Committee was devoted in large part to a summary of the results achieved and the trend of events during the past ten years. He pointed out the grave responsibilities connected with the work of the next revision of the Pharmacopœia and stated that the Committee would receive greater aid from manufacturers and importers than heretofore and that the next Committee would be embarrassed with riches rather than a lack of information and that the greatest difficulty will be to make a wise selection for the U. S. P. IX. He also referred to the fact that the health and well-being of the nation depends in a large measure upon the work of the Convention and that if the Committee of Revision fails to recognize the responsibilities of the situation the sceptre must pass from the hands of the Convention forever.

It was fitting that the Chairman of the Revision Committee should give due credit to Professor Diaz for his services in the Spanish translation of the U. S. Pharmacopœia and also to Surgeon-General, Dr. Walter Wyman for his co-operation in fixing the standards for Diphtheria Antitoxin and especially in the preparation of the "Digest of Comments" on the Eighth Decennial Revision.

Professor Remington as Chairman of the Committee of Re-

vision also presented in printed form the general principles to be followed in revising the U. S. Pharmacopœia IX. As these principles had been formulated by the members of the outgoing Committee of Revision they received the endorsement of the Convention, though not without some discussion. As we have not sufficient space to print all of the general principles accepted it may suffice to call attention to some of the more important of them.

SCOPE OF THE PHARMACOPŒIA.—We recommend that the Committee of Revision be authorized to admit into the Pharmacopœia any medicinal substance of known origin; but no substance or combination of substances shall be introduced if the composition or mode of manufacture thereof be kept secret, or if it be controlled by unlimited proprietary or patent rights. Substances used only for technical purposes should not be admitted to the next Pharmacopœia, and a statement should be placed in the preface to the effect that standards of purity and strength, prescribed in the text of the Pharmacopœia, are intended solely to apply to substances which are used for medicinal purposes or in determining the purity and identity of the same.

SYNONYMS.—We recommend that the list of synonyms should be enlarged for the next revision, and the synonyms printed in the text of the Pharmacopœia, immediately after the English name of the substance. A statement should be made in the preface of the Pharmacopœia, that substances labeled with synonym, must comply with the same standards, tests and requirements as are demanded for the official article under any name.

PURITY AND STRENGTH OF PHARMACOPŒIAL ARTICLES.—We recommend that the Committee be instructed to revise as carefully as possible the limits of purity and strength of the pharmacopœial chemicals and preparations for which limiting tests are or may be given. While no concession should be made towards a diminution of medicinal value, allowance should be made for unavoidable, innocuous impurities or variations due to the particular source or mode of preparation, or to the keeping qualities of the several articles.

The "Purity Rubric," which limits the percentage of innocuous impurities, as introduced into the Eighth Revision, should be continued, and tests and requirements should be appended to each article carrying a "Purity Rubric."

In the case of crude drugs and natural products, the limits of admissible impurities should be placed at such a figure as to exclude any that would not be accepted by other countries.

INTERNATIONAL STANDARDS.—The International Conference for the Unification of Formulas for Potent Remedies performed a signal service for all countries by recommending the various pharmacopœias of the world to adopt certain standards for potent medicines. It is recommended that the next Committee of Revision adopt these standards, but it is believed that

it would be unwise to require the acceptance of the details of pharmaceutical or other processes recommended by the International Conference.

If the finished product conforms to the International standards we believe that each Country should be left free to adopt such detail and manipulation as may seem to them best. Nothing should prevent, however, the adoption of the recommendation of the conference, as to details, if in the opinion of the next Committee of Revision, by so doing, the Pharmacopœia can be improved.

GENERAL FORMULÆ.—It is recommended that general formulæ be introduced as far as the particular nature of the several drugs will permit, for fluid extracts, tinctures and such other preparations as are made by identical processes, and that the general formula to be followed in each case be merely indicated by reference.

APPENDING A LIST OF PREPARATIONS IN WHICH AN OFFICIAL ARTICLE IS USED.—It is recommended that, especially for the convenience of practising physicians, there should be appended after each article in the text a list of the official preparations in which it is used.

A few exceptions may be made to this in such cases as water, alcohol, glycerin, sugar, etc.

ALCOHOLIC PERCENTAGE IN OFFICIAL PREPARATIONS.—It is recommended that a range of volume content, of absolute alcohol, be stated in the Pharmacopœia, for each preparation containing alcohol.

ASSAY PROCESSES.—We recommend that the Committee be instructed to introduce assay processes for as many of the potent drugs and preparations made therefrom as may be found practicable, provided that the processes of assay are reasonably simple (both as to methods and apparatus required) and lead to fairly uniform results in different hands. As regards the products of such assays, tests of identity and purity should be added wherever feasible.

It is recommended that biological tests or assays, when accurate and reliable, may be admitted.

COMPOSITE PREPARATIONS.—It is recommended that new composite (compound) preparations be discouraged as far as possible.

PHARMACOGNOSTICAL DESCRIPTIONS.—It is recommended that, with the description of a crude drug, there be included brief, pharmacognostical descriptions, both macroscopic and microscopic where practicable, and there should be added a statement of the appearance of the structural elements in the powder, when examined microscopically, as a means of detecting adulteration.

POWDERED DRUGS.—It is recommended that, in the next Pharmacopœia, powdered drugs be required to represent the entire drug unless specifically stated otherwise. Where the drug can be powdered without residue this should be required; in other cases the amount of allowable tailings, gruffs, or residue should be determined and inserted in the text.

DIAGNOSTICAL REAGENTS.—It is recommended that there be included in the next Pharmacopœia, such reagents, with standards for strength and purity, as are needed for the proper execution of tests that are valuable and important in the making of a correct diagnosis.

PUBLICITY.—In the course of the discussion of the report of the Committee of Revision the following principle was introduced by Dr. W. J. Schieffelin and received the support of the Convention: "It is recommended that the General Committee of Revision make public for comment and criticism an abstract of the changes in descriptions and standards which may be proposed before the final adoption of the report and publication of the Pharmacopœia."

With the exception of the subject of diagnostical reagents all of the principles adopted had received the thorough consideration of the members of the professions interested. As to whether diagnostical reagents should be included in a Pharmacopœia the future only can determine.

On the recommendation of the Board of Trustees the following amendments to the Constitution and By-Laws were adopted after some discussion by the Convention.

I.—Amendment of Section 2, Article II, relating to membership, by inserting after the title "the Surgeon-General of the United States Marine-Hospital Service," the following: "the Secretary of Agriculture, the Secretary of Commerce and Labor, the Association of Official Agricultural Chemists, the Association of State and National Food and Dairy Departments, the National Wholesale Druggists' Association and the National Dental Association."

II.—Also amendment of Article IV, concerning "Committees and Trustees," by changing the title "Committee of Revision," to that of "General Committee of Revision."

III.—Also Chapter V of the General Committee of Revision was amended so that the general effect was to increase the number of members on the Committee of Revision hereafter to be known as the "General Committee of Revision" from twenty-five to fifty, said General Committee of Revision to create from its own membership an Executive Committee of Revision of fifteen members, to have immediate charge of the work of revision, and also giving to said General Committee of Revision certain advisory and supervisory powers over the work of the Executive Committee of Revision.

Prof. Wm. C. Anderson offered an amendment to include the National Association of Retail Druggists among the associations entitled to representation. This was ruled out of order by the Chairman, Dr. Wall, and was subsequently laid upon the table upon motion of Dr. McCormack. It should be stated that this

amendment could not be acted upon by the Convention as it required a previous recommendation from the Board of Trustees (see this JOURNAL, 1909, p. 524). In some quarters the impression is that Dr. Simmons, of the Board of Trustees, is largely responsible for the Board's failing to recommend the seating of the N. A. R. D. It would be indeed interesting to know just what the minutes of the Board of Trustees show in this connection.

The fact that it was necessary for the Board of Trustees to borrow \$7000.00 during 1902-1905 caused some discussion as to the devising of ways and means not only to relieve this situation, but to provide sufficient funds to carry on the work of revision. A recommendation was submitted by the Board of Trustees, to whom the matter was brought for consideration, that each organization entitled to representation pay a sum of \$50.00 and that failing to comply with this within one year the sum of \$75.00 be required of them; and furthermore, that all new organizations be required to pay \$100.00 on being admitted to the Convention. It was also intended that all organizations which comply with this requirement be allowed 10 copies of the U. S. P. IX. These several recommendations were voted down, it being the unanimous opinion that the Board of Trustees should secure sufficient revenues by increasing the price on each copy of the Pharmacopœia and guarding the copyright. Ten years ago (see U. S. P. VIII, p. xxvi) the balance turned over to the Convention of 1900 amounted to about \$12,000.00. The Convention of 1900 voted an honorarium of \$200.00 to each member of the Committee of Revision so that the balance in the hands of the Board of Trustees during 1900-1901 amounted to nearly \$6000.00. The income from the sales of the VII edition of the U. S. P. during the years 1900-1905 amounted to about \$10,500.00 while the receipts from sales of the VIII edition of the U. S. P. between 1905-1910 amounted to \$87,244.56; and the receipts from the Spanish translation were \$2,762.22. The balance reported by the Treasurer, Dr. G. Wythe Cook, to the Convention of 1910 amounted to \$8,394.01.

The amount expended for publication was \$39,985.42. The Chairman of the Revision Committee received an honorarium of \$5000. The following members of the Committee received an honorarium of \$1000.00 each: Messrs. Coblentz, Dohme, Sadtler and Lyons. The following members received \$600.00 each: Messrs. Caspari, Jr., Diehl, Hallberg, Kraemer and Squibb. The follow-

ing members received \$400.00 each: Messrs. Haines, Kremers, Rusby, Scoville and Stevens. The following members received \$200.00 each: Abel, Davis, Good, Gregory, Hare, Marshall, Oldberg, Payne, Sayre, Wilcox and Wood. The Treasurer received \$200.00 and the Secretary to the Board of Trustees received \$1500.00. For clerical assistance and general office supplies \$17,255.73 was expended, the greater proportion of which was used by the Chairman of the Committee of Revision in circularizing and distributing reports, etc. For chemicals and other supplies about \$1500.00 was expended and for the use of experts \$5263.25 was expended, of which about \$3000.00 was used by the Committee on Inorganic Chemicals. For the Spanish translation \$1500.00 was given to Professor Diaz and the sum of \$1000.00 was paid the Rice Estate. Messrs. Matos and Pablo were awarded \$250.00 and \$97.56 respectively for reading proof of the Spanish translation. In addition to this the Board of Trustees used for travelling and general expenses the sum of \$7855.33. A number of additional items are given in the Financial Report submitted by the Board of Trustees.

The Nominating Committee of 148 members met at 8 o'clock on the evening of May 10th and concluded its work at 4 A.M. on the morning of the 11th. The following nominations were approved by the Convention:

President, Dr. H. W. Wiley, Washington, D. C.; First Vice-President, Dr. N. S. Davis, Chicago, Ill.; Second Vice-President, Chas. Caspari, Jr., Baltimore, Md.; Third Vice-President, Dr. O. T. Osborne, New Haven, Conn.; Fourth Vice-President, Leo Eliel, South Bend, Ind.; Fifth Vice-President, Dr. W. A. Bastedo, New York, N. Y.; Secretary, Dr. M. G. Motter, Washington, D. C.; Assistant Secretary, Dr. N. P. Barnes, Washington, D. C.; and Treasurer, S. L. Hilton, Washington, D. C. Board of Trustees: J. H. Beal, Scio, Ohio; F. W. Meissner, La Porte, Ind.; W. J. Schieffelin, New York, N. Y.; Dr. G. H. Simmons, Chicago, Ill.; and Dr. H. M. Whelpley, St. Louis, Mo.

GENERAL COMMITTEE OF REVISION.

1. REMINGTON, JOSEPH P.,

Professor of Theory and Practice of Pharmacy, Philadelphia College of Pharmacy.

2. KRAEMER, HENRY,

Professor of Botany and Pharmacognosy, Philadelphia College of Pharmacy.

3. CASPARI, CHAS., JR.,
Professor of Theory and Practice of Pharmacy, University of Maryland, Department of Pharmacy.
4. DIEHL, C. LEWIS,
Professor of Practical Pharmacy, Louisville College of Pharmacy.
5. SCHLÖTTERBECK, JULIUS O.,
Professor of Pharmacognosy and Materia Medica, University of Michigan, Department of Pharmacy.
6. LYONS, ALBERT B.,
Chemist, Nelson Baker & Company, Detroit, Michigan.
7. WOOD, HORATIO C., JR.,
Associate Professor of Pharmacology, University of Pennsylvania.
8. OSBORNE, OLIVER T.,
Professor of Therapeutics and Materia Medica, Yale Medical School.
9. WILBERT, M. I.,
Assistant Pharmacologist, Hygienic Laboratory, United States Public Health and Marine-Hospital Service.
10. RUSBY, HENRY H.,
Professor of Botany and Materia Medica, College of Pharmacy of the City of New York.
11. HUNT, REID,
Chief, Division of Pharmacology, Hygienic Laboratory, United States Public Health and Marine-Hospital Service.
12. DOHME, ALFRED R. L.,
Chemist, Sharp and Dohme, Baltimore, Md.
13. STEVENS, A. B.,
Professor of Theory and Practice of Pharmacy, University of Michigan, Department of Pharmacy.
14. BERINGER, GEORGE M.,
Chemist and Retail Druggist, Camden, N. J.
15. EBERLE, EUGENE G.,
Dean, Department of Pharmacy, Baylor University, Dallas, Texas.
16. SAYRE, LUCIUS E.,
Professor of Materia Medica, University of Kansas, School of Pharmacy.
17. KREMERS, EDWARD,
Director of Chemical Laboratories, University of Wisconsin.
18. PUCKNER, W. A.,
Director, Chemical Laboratory, American Medical Association, Chicago, Ill.
19. KEBLER, LYMAN F.,
Chief of Drug Laboratory, Bureau of Chemistry, U. S. Department of Agriculture.
20. HALLBERG, CARL S. N.,
Professor of Theory and Practice of Pharmacy, University of Illinois, School of Pharmacy.
21. LA WALL, CHARLES H.,
Associate Professor of Theory and Practice of Pharmacy, Philadelphia College of Pharmacy.

22. ROSENGARTEN, GEORGE D.,
Chemist, Powers—Weightman—Rosengarten Company, Philadelphia,
Pa.
23. COBLENTZ, VIRGIL,
Professor of Chemistry, College of Pharmacy of the City of
New York.
24. HATCHER, ROBERT A.,
Professor of Pharmacology, Cornell University, Medical Depart-
ment, New York.
25. GOOD, JAMES M.,
Professor of Theory and Practice of Pharmacy, St. Louis College
of Pharmacy.
26. ARNY, HARRY V.,
Professor of Theory and Practice of Pharmacy, Cleveland School
of Pharmacy.
27. KOCH, JULIUS A.,
Professor of Chemistry, University of Pittsburgh, Department of
Pharmacy.
28. SADTLER, SAMUEL P.,
Professor of Chemistry, Philadelphia College of Pharmacy.
29. BODEMANN, WILHELM,
Retail Druggist, Chicago, Ill.
30. LONG, JOHN H.,
Professor of Chemistry, Northwestern University Medical School,
Chicago.
31. RAUBENHEIMER, OTTO,
Retail Druggist, Brooklyn, N. Y.
32. VANDERKLEED, CHARLES E.,
Chemist, H. K. Mulford Company, Philadelphia, Pa.
33. SOLLMANN, TORALD,
Professor of Pharmacy and Materia Medica, Western Reserve
University, Medical Department.
34. NIXON, CHARLES F.,
Retail Druggist, Leominster, Mass.
35. ANDERSON, JOHN F.,
Director, Hygienic Laboratory, U. S. Public Health and Marine-
Hospital Service.
36. DAVIS, NATHAN S.,
Professor of Principles and Practice of Medicine and Clinical
Medicine, Northwestern University Medical School.
37. FRANCIS, JOHN M.,
Chemist, Parke, Davis and Company, Detroit, Mich.
38. CASPARI, CHARLES E.,
Professor of Chemistry, St. Louis College of Pharmacy.
39. TRUE, RODNEY H.,
Physiologist, Bureau of Plant Industry, U. S. Department of Agri-
culture.

40. GREGORY, WILLIS G.,
Dean, Buffalo College of Pharmacy.
41. GORDIN, HARRY M.,
Professor of Chemistry, Northwestern University, Department of
Pharmacy.
42. ENGLAND, JOSEPH W.,
Director Scientific Department, Smith, Kline and French Company,
Philadelphia, Pa.
43. EDMUNDS, CHARLES WALLIS,
Professor of Therapeutics and Materia Medica, University of
Michigan, Department of Medicine and Surgery.
44. DIEKMAN, GEORGE C.,
Professor of Theory and Practice of Pharmacy, College of Pharmacy
of the City of New York.
45. MARVEL, PHILIP,
Physician, Atlantic City.
46. BARTLEY, ELIAS H.,
Professor of Chemistry, Toxicology and Pediatrics, Long Island
College Hospital, Brooklyn, N. Y.
47. HAINES, WALTER S.,
Professor of Chemistry, Materia Medica and Toxicology, Rush
Medical College, Chicago, Ill.
48. ALPERS, WILLIAM C.,
Retail Druggist, New York.
49. HOPP, LEWIS C.,
Retail Druggist, Cleveland.
50. PLAUT, ALBERT,
Wholesale Druggist (Lehn and Fink), New York.

The General Committee on Revision had several meetings on Thursday and Friday and elected the following officers: Chairman, Joseph P. Remington; First Vice-Chairman, C. Lewis Diehl; Second Vice-Chairman, H. C. Wood, Jr.; Secretary, C. H. LaWall.

The Executive Committee will be selected by ballot of the General Committee of Revision which will be effected by correspondence.

A number of written communications were received and a number of recommendations were adopted and referred to the General Committee of Revision. Among these were recommendations from the American Pharmaceutical Association, the Philadelphia Branch of the A. Ph. A., the Philadelphia College of Pharmacy, Section on Dermatology of the American Medical Association, etc. The delegates from the Medical Society of New

Jersey presented the following code of ex cathedra rules formulated by Dr. Henry L. Coit of Newark, N. J. which was referred to the General Committee of Revision and Board of Trustees.

ETHICAL RULES FOR THE GUIDANCE OF PHYSICIANS AND PHARMACISTS IN
THEIR RELATIONS WITH ONE ANOTHER.

Propositions.

FIRST.—Ethical principles or standards of right conduct exist, irrespective of their formulation or codification.

SECOND.—Ethical rules are calculated to elevate standards of moral conduct and to foster a spirit of harmony between professional men.

THIRD.—A code of ethics is designed not only for the restraint of those who are actuated by unworthy motives, but for the guidance of those, also, who seek to be governed in their actions by high and true principles.

The Duties of the Physician to the Pharmacist.

FIRST.—The physician has no moral right to discriminate in favor of one pharmacist to the detriment of another, except for dishonesty, incompetency or unscientific methods of work.

SECOND.—The physician is never justified in receiving from a pharmacist gratuities in return for patronage; in depositing secret formulas with an individual pharmacist, or by word or deed to jeopardize his professional reputation.

THIRD.—The physician may sometimes find it an advantage to the patient to dispense the medicine; yet in the main it must be regarded as a subterfuge and a hindrance to all interests involved. The physician should, if practicable avail himself of the superior technical skill of a trained pharmacist in the preparation and dispensing of medicines.

Duties of the Pharmacist to the Physician.

FOURTH.—The pharmacist who recommends drugs or medicines for specific remedial purposes either directly or through the avenues of advertisement thereby exceeds the limits of his profession and commits an act unworthy of his calling.

FIFTH.—The pharmacist who consents to diagnose disease or prescribe for patients except where emergencies arise, without a proper medical training, assumes responsibilities for which he is not qualified and justly incurs the disapproval of physicians.

SIXTH.—The pharmacist transgresses his true province when for commercial purposes he issues to physicians printed matter setting forth the therapeutic indications for the use of drugs or medicinal preparations. The constituents of a drug or compound together with its chemical and physical properties should be a sufficient guarantee of its utility.

The Duties of the Physician and the Pharmacist to the Public.

SEVENTH.—The combined efforts of the physician and the pharmacist are required to protect the public from the nostrum maker, the pseudo-scientific pharmacist, the sectarian physician and drug vendor, and the two should be in continual alliance to demand the extermination of these commercial and mercenary institutions.

EIGHTH.—The physician and the pharmacist should, as far as possible, limit the multiplication of manufactured proprietary compounds. It must be regarded as reprehensible to encourage the use of these remedies to the exclusion of those which are official in the pharmacopœias. It is also their plain duty to discourage the use and sale of all medicines which lead to baneful drug habits.

NINTH.—The best interests of the patient are undoubtedly conserved by the custom of physicians to practice rational therapeutics to the exclusion of those methods which tend to the use of many remedies or those of unknown composition; and the supreme effort of the dispensing pharmacist should be to complete the circle of therapeutics by supplying the demands of experimental and clinical teaching with eligible and trustworthy preparations.

In accordance with a motion by H. M. Whelpley, the Secretary was instructed, by the Convention, to furnish the pharmaceutical and medical press of the country, with the following resolutions.

By E. G. Eberhardt: Resolved, That this Convention recommend to the National and State Food and Drug Inspectors that they urge the purchase of the U. S. Pharmacopœia by such druggists as they may find to be without them.

By H. G. Beyer: That every physician in this country should be requested, by the various medical associations, that he should keep in his office a Pharmacopœia.

The sessions on Tuesday, and on Wednesday morning were presided over by Dr. Otto A. Wall, who showed himself to be an able parliamentarian and dispatched the work with discretion and justice. While there were a number of attempts made on Wednesday morning by some of the members to have the President-elect, Dr. Wiley, presented to the members at that time, Dr. Wall showed that he proposed to present him at a time which could be characterized as the climax of the strenuous sessions already held and which marked the termination of the old Convention and the beginning of the new. At the right moment he introduced the

members of the General Committee of Revision to the Convention. This was followed by the introduction of the members of the Board of Trustees and subsidiary officers of the Association, for each of whom he had an appropriate word of encomium, and finally the presentation of the President-elect, Dr. Harvey W. Wiley, who was brought to the platform by Dr. Wilcox. Dr. Wall then turned over the gavel and office to Dr. Wiley, saying that he "needed no introduction to this Convention as he was well known to all of the people of the United States." In response to calls for a speech, Dr. Wiley said among other things that the man of science is a patriot and a man of deeds. He not only does his duty but he does it promptly. He promised a prompt beginning of the work of revising the Pharmacopœia and a vigorous prosecution of it and that if the Constitution permits the exercise of authority of the President he will wield it in this direction.

On Wednesday afternoon during the discussion of the "General Principles," Dr. N. S. Davis of Chicago occupied the chair and on Thursday morning Dr. O. T. Osborne acted as presiding officer, both of whom discharged their duties in a creditable manner.

At the conclusion of the Convention on Thursday morning President Wiley occupied the chair, while resolutions of thanks to the out-going officers, to the Committee on Credentials and Arrangements, etc., were passed. About noon he declared the Convention adjourned to meet on the first Tuesday in May, 1920.

It is not too much to say that the Convention just concluded has shown a progressive spirit to a degree that could hardly have been anticipated. Professor Remington, as Chairman of the Committee of Revision, called attention to the fact that there could be but one thought in Pharmacopœia work and that was that "the best and always the best" must be found therein. President Wiley reminded the members of the Committee of Revision that as patriots in the service of their country they must endeavor to accomplish the work before them promptly. The actions of the delegates, including their resolutions, showed again and again that they did not desire to exercise any restraining influence on the Committee of Revision and that whatever the sciences and arts had produced they expected the members to utilize, wherever practicable, in the preparation of a work and standard that is to become the hand-book of the physician and pharmacist in ministering to the needs of the people who are suffering from disease and in ill

health. Finally, it must be said that the promise of the new Decennial Revision is in some measure due to the efforts of the surviving officers and members of the Committee of Revision appointed in 1900, who have labored in part under the inspiration of those who were taken from the ranks by the silent hand of Death, and who have stood by the work through tempest and calm eager that their work might be adapted to the new order of things and acceptable to the Convention. The new Pharmacopœia (U. S. P. IX), without inviting comparison, ought to be, as we believe it will be, a book of the times, suited to the modern demands and practices of medicine and pharmacy in the best sense of the words and at the same time adapted to the legislative requirements of the Government, which supplements the united efforts of physicians and pharmacists in devising approved and acceptable standards for medicines by giving them the weight and authority of legal standards.

H. K.

THE AMERICAN PHARMACEUTICAL ASSOCIATION.

The fifty-eighth annual meeting of the American Pharmaceutical Association was held at the Hotel Jefferson in the City of Richmond, May 3rd to 7th.

It was a notable convention not only by reason of the amount of Association work accomplished, but also because it proved to be the forum for the discussion of pharmacopœial matters, so that the members were well prepared to intelligently discuss and vote upon the subjects which were to be brought in a concrete form before the Pharmacopœial Convention the week following. The large number of papers which were presented in the various sections, the interesting reports from the various standing committees, and the important recommendations from the Council, well indicated that the officers of the Association as well as of the several sections were competent, that the members were loyal, and that the Association truly represented the activities of the pharmacists of the United States.

The weather was excellent, the surroundings were inspiring, and enthusiasm with earnestness characterized the entire proceedings from Tuesday morning till Saturday evening.

Owing to restricted space in this JOURNAL this year a much more condensed account of the meeting will be given than heretofore has been the custom, but we hope later to present abstracts, at least, of all the more important papers.

At the opening session the Convention was fortunate in having addresses of welcome by Hon. William H. Mann, the Governor of Virginia, and Hon. D. C. Richardson, the Mayor of Richmond. The addresses were responded to by Messrs. Whelpley and Beal, respectively. Greetings were also extended from delegates of the National Association of Retail Druggists, the National Wholesale Druggists' Association, the United States Public Health and Marine-Hospital Service, the Department of Agriculture, and the American Medical Association.

The address of Dr. H. H. Rusby, the President of the Association, had been previously published in the *Bulletin of the American Pharmaceutical Association* for May (pp. 298-310) and so the members were fully prepared to consider it. It was, as stated by Professor Beal, chairman of the committee, to whom the address was referred, "a frank and fearless treatment of matters which are of vital concern to the Association." Some ten or eleven of the recommendations dealing with methods of increasing the membership, the efficiency of the committees of the Association, and pharmacopœial principles were approved by the Association. A number of the subjects discussed by President Rusby are deserving the further attention of those concerned in the development and coördination of the work of the several bodies that are each striving, more or less independently, to attain the highest degree of usefulness. While the Association was not prepared to consider the desirability and practicability of the publication of the National Formulary by the U. S. Pharmacopœial Convention, there must be sooner or later a closer affiliation between the committees having in charge the N.F. and U.S.P. Again in calling "attention to the great desirability of the imposition of some educational and professional requirements with a corresponding license, for those engaging in commerce in drugs and medicines," President Rusby has presented a problem for the Committee on National Legislation which seems to be of a fundamental nature.

In considering the subject of "danger of commercialization" Dr. Rusby, however, handled a "live wire" which at the present time is a subject for discussion. The Committee on the President's

Address took the position that these opinions should be received by the Association merely as "personal opinions upon questions and policies concerning which reasonable men may justly and honestly differ."

So soon as convenient after the adoption of the Report on the President's Address Mr. C. M. Ford presented the following resolutions which it was moved to lay upon the table, but the motion being lost, were adopted by the Association without any discussion:

Resolved, That in the opinion of the American Pharmaceutical Association it is neither wise nor expedient, even in pursuit of schemes which it is claimed will advance the material welfare of dispensing pharmacists, to assail, antagonize, or malign any class inseparably joined to us by commercial or professional ties.

Further, That we seriously deprecate the hostile attitude toward the medical profession and the jobbing fraternity of various drug journals assuming to represent pharmacists in general, or some considerable body of pharmacists in particular.

Further, That we respectfully urge upon the officers of the American Druggists' Syndicate a more careful supervision of the utterances of their so-called "Organ." Its harsh language is hurtful to pharmacists and embarrassing to them in their relations with one another and with physicians and jobbers.

The mercenary schemes of a few overzealous and adventurous individuals who, being frequently without any training in pharmacy, and who entered its ranks solely for gain and to explain their peculiar ideas of high finance, can have no sympathy with its aims or traditions. Such schemes can be helpful and profitable to only an insignificant few and must necessarily bring inevitable disappointment and disaster to the multitude who follow in their train.

Be it further resolved, That we recommend that any movement for the reform of medical practice be allowed to originate and proceed within the medical profession.

Further, That we are opposed to any attempt upon the part of the pharmacal press to dictate or compel any such reform, believing as we do that the medical profession is eminently qualified to institute and carry out its own necessary reforms.

The report of the Treasurer, H. M. Whelpley, showed that the total invested funds of the Association, *i.e.*, those on which the interest or only part of the interest can be used amounted to \$28,223.89, being an increase over last year of \$4,680.54. The general secretary, Charles Caspari, Jr., presented a report on the financial accounts in his hand, which related to the receipts

from the sales of the National Formulary and Decennial Index, both reports showing a creditable balance in hand.

The Nominating Committee presented a report giving a list of nominees for the respective offices, which list will be submitted to, and voted upon by, the members through the mails.

The Council recommended that Professor Dr. Arthur Meyer of Marburg, Germany, and Professor Dr. A. Tschirch of Berne, Switzerland, be made Honorary Members, which recommendation was approved by the Association and these eminent pharmacognosists were accordingly elected as honorary members of the Association.

The Committee on Membership reported that during the year 216 new members had been elected. It was also requested that in the future the names of applicants for membership be submitted to their respective State representatives upon the Committee on Membership for approval, before being voted upon by the Council. An application for permission to form a Nashville Branch of the A. Ph. A. was received by the Council and granted. A motion was also passed that the Association have official numbered buttons in lieu of the local badges. The next annual meeting will be held in Boston from August 14th to 18th, 1911 and C. Herbert Packard was selected by the Council as the Local Secretary.

The officers of the Council for the ensuing year are: Chairman, James H. Beal; Vice-Chairman, Henry H. Rusby; and Secretary, Joseph W. England. The following officers of the Association whose election is dependent upon the recommendation of the Council were re-elected: General Secretary, Charles Caspari, Jr.; Treasurer, H. M. Whelpley; Reporter on the Progress of Pharmacy, C. Lewis Diehl; Editor of the *Bulletin*, C. S. N. Hallberg. The Historian, a permanent officer of the Historical Section was made a member of the Council Ex-officio. George M. Beringer was re-elected Chairman of the Committee on Unofficial Standards and the following new members were elected: C. A. Dye (in place of G. B. Kauffmann); and H. H. Rusby (in place of A. I. Cohn).

One of the most important steps taken by the Association was the approval of the proposal to launch the *Journal of the American Pharmaceutical Association*, the first number of which is to appear in 1911. The scope of the *Journal* is to include editorial comments, signed editorials, original articles and abstracts of recent literature relating to pharmacy. It was decided, also, to issue the Report on the Progress of Pharmacy at the end of each fiscal year in the

form of a bound volume. The members of the Association will receive the monthly journal as issued and the bound report at the end of the fiscal year. It is proposed that the size of the reading page of the *Journal* shall be practically equal to that of the present page of the *Proceedings and Bulletin*. The publication of the *Journal* will be under the direction of a Committee on Publication of nine members.

The reports of a number of special committees were presented, including that on Reorganization by C. S. N. Hallberg; and one of the A. M. A. on the National Formulary by Dr. Robert A. Hatcher, etc.

The following is an abstract of the lengthy report of the Committee on National and State Legislation which was read by the Chairman, S. L. Hilton:

The field of legislation in which the A. Ph. A. may become effective and should be interested in, should be referred to one committee that has been carefully selected and well instructed with respect to the wishes of the association as to their attitude on all questions pertaining to national legislation.

The original Coudrey bill providing for the editing and publishing of the U.S.P. should be opposed and defeated. The Coudrey bill providing that all drugs shall be of the standard required by the U.S.P. and N.F. and where no standards are provided granting the power to the Secretary of Agriculture to establish such standards should be carefully considered. The latter proposition providing for the establishing of standards needs no argument, providing that all interests be carefully considered, would be an advance in the right direction and redound to the good of every one.

The first proposition, however should be carefully considered, under the provisions of the Food and Drugs Act, any drug may differ from the standard if it is clearly explicitly stated on the label. By the terms of this provision the field is left open for adulteration and sophistication and the object sought by the Coudrey bill is to overcome this difficulty. The Chairman stated that personally he felt that this provision of the Food and Drugs Act should be amended so that no deviation from the standards should be permitted, provided the standards of the U.S.P. and N.F. as established shall be fair and reasonable and that they can be met and attained as an average condition in the usual supply.

The present conditions with reference to the use and abuse of habit-forming drugs must carefully be considered and some means devised, by enactment of a National character, whereby the sale of all narcotic and habit-forming drugs in interstate commerce to others than those licensed to prescribe and dispense shall be completely stopped.

The bills proposing to establish a Department of Public Health should be amended so as to provide for a bureau of pharmacy.

With reference to the sale of alcoholic beverages, pharmacists should recognize that the time has arrived when it has become necessary for them to clearly establish their position in the eye of the public that they are pharmacists, and not rum sellers. They should be willing to eliminate from their business all sales of alcoholic beverages for any purpose whatsoever.

The bill to regulate the manufacture and sale of smoking opium is not rigid enough, it should provide for the abolishment of all such practices and provide heavy penalties in each and every case.

The bill providing for the regulation of the sale of habit-forming drugs in interstate commerce, whereby the sale of narcotic and habit-forming drugs interstate commerce can be better regulated and controlled, should be supported, it should be the aim of every pharmacist to put a stop to the sale of all such drugs except for legitimate purposes and under proper regulation.

The following is an abstract of the Report of the Committee on Weights and Measures:

Dr. S. W. Stratton, Director of the U. S. Bureau of Standards, Department of Commerce and Labor, Washington, D. C., furnished the chairman, at his request, a pamphlet on "The International Metric System of Weights and Measures," which was expressly prepared to answer some of the more simple questions addressed to the Bureau of Standards in regard to the metric system and its use. This pamphlet gives a concise history of the metric system, the names of the countries giving governmental support to the system, a synopsis of the system, and tables and diagrams showing a comparison of metric and customary units. And it is believed that this pamphlet would furnish an excellent basis for an article intended for educational purposes, whether circulated among pharmacists, physicians or others.

The Bureau of Standards has also gotten out a large chart showing the relation of the three metric units to one another, and in turn to the customary units employed. This chart would be especially useful in schools of pharmacy and medicine, and in other educational institutions where the subject of weights and measures is taught.

In fact, the chairman is of the opinion that most effective educational work leading to the general approval of the metric system can be accomplished by getting teachers in the public schools to lay more stress on the advantages of the metric system, and to give practical exercises using the actual measures and weights. In fact, the question of the adoption of the metric system universally in the United States could not long be delayed when once the pupils in our schools have learned to actually use metric weights and measures.

It is rather remarkable that, as shown in the pamphlet already referred to, when the use of the metric system is required in the Medical Departments of the Army and Navy, and in the U. S. Public Health and Marine-Hospital Service, and beside legalized in the Philippine Islands and made

obligatory in Porto Rico, there has been adopted in the Senate of the U. S. resolution entitled S. J. Res. 37 (Congressional Record, March 11, p. 3121), which is now under consideration by the Committee on Printing of the House of Representatives. This resolution provides that all documents, papers, etc., published by the Government of the United States be printed in the English language and would require that wherever references to metric weights and measures, centigrade thermometer and similar standards are used, the equivalent in the English standard be given.

This resolution scarcely needs other comment than to say that the necessity exists for guarding the progress that has already been made.

A similar back tendency in certain directions is shown by a recent editorial in *American Medicine* (January, 1910, p. 7) on "The Tyranny of the Metric Advocates and French Metric Tyranny." While the percentage of physicians who actually use the metric system in prescription writing is very small, it is probable that the majority of them recognize its advantages, and hence it may be taken for granted that this editorial will not have any real influence in hindering progress.

As showing what may be done by local branches of the A. Ph. A. attention is called to the action of the Chicago Branch which proposed two resolutions for submission to the National Convention of City Sealers which met in Washington on February 25 (See A. Ph. A. Bulletin, February, 1910).

A. B. STEVENS,
CHARLES E. CASPARI,
C. S. BRINTON,
PHILIP ASHER,
HENRY KRAEMER, Chairman.

One of the interesting and instructive features of the meeting was an exhibit of medicinal plants which was planned by President Rusby and largely contributed to by him. Dr. R. H. True, of the Bureau of Plant Industry of the U. S. Department of Agriculture, also sent a number of interesting plants from the Arlington drug farm of the government. Support was also received through the specimens contributed by Messrs. Eli Lilly & Co., Prof. E. V. Howell, University of North Carolina Department of Pharmacy, Professor Sayre of the University of Kansas and Professor Kraemer of the Philadelphia College of Pharmacy. With the exception of the specimens of hydrastis growing in soil and brought to the meeting by Professor Kraemer, all of the plants were placed in jars containing water and retained their fresh condition during the greater portion of the meeting. Quite a number of the specimens represented the leafy branches of the plant and gave rather a good idea of the nature of the plants. The following is an attempt

to give a nearly complete list of the plants which were exhibited and is published as it may be suggestive for use in connection with future exhibits.

Aconitum Napellus, *Acorus Calamus*, *Achillea millefolium*, *Aesculus glabra*, *Aralia nudicaulis*, *Arctium Lappa*, *Aristolochia Serpentaria*, *Artemisia Absinthium*, *Arisaema triphyllum*, *Asarum reflexum*, *Asclepias tuberosa*, *Baptisia tinctoria*, *Brauneria (Echinacea) pallida*, *B. purpurea*, *Calendula officinalis*, *Capsella Bursa-pastoris*, *Carum Carvi*, *Chamaelirium carolinianum*, *Cercis canadensis*, *Chelone glabra*, *Cimicifuga racemosa*, *Cinnamomum zeylanicum*, *Conium maculatum*, *Convallaria majalis*, *Cornus florida*, *Cornus florida* variety *purpurea*, *Dryopteris marginalis*, *Equisetum hyemale*, *Eriodictyon californicum*, *Euonymus atropurpureus*, *Foeniculum vulgare*, *Gelsemium sempervirens*, *Geranium maculatum*, *Glechoma hederacea*, *Glycyrrhiza glabra*, *Gnaphalium obtusifolium*, *Hepatica acuta* and *H. triloba*, *Hydrangea arborescens*, *Hydrastis canadensis*, *Hyoscyamus niger*, *Inula Helenium*, *Iris versicolor*, *Jeffersonia diphylla*, *Leptamnium virginianum*, *Levisticum officinale*, *Melissa officinalis*, *Mentha crispa*, *M. longifolia*, *M. piperita* and *M. spicata*, *Monarda fistulosa*, *Nepeta Cataria*, *Panax quinquefolium*, *Parthenocissus quinquefolia*, *Passiflora caerulea*, *Phytolacca decandra*, *Piper nigrum*, *Phlox carolina* and *P. ovata*, *Plantago major*, *Polygala Senega*, *Podophyllum peltatum*, *Prunus serotina*, *Pycnanthemum (Koellia) albescens*, *Quercus alba*, *Rhus glabra*, *Rubia tinctorum*, *Rumex crispus* and *R. obtusifolius*, *Salix alba*, *Salvia officinalis*, *Saponaria officinalis*, *Sassafras officinale*, *Scopolia carniolica*, *Senecio aureus*, *Spathyema foetida*, *Tanacetum vulgare*, *Thea sinensis*, *Trillium erectum*, *Taraxacum officinale*, *Triosteum perfoliatum* and *T. angustifolium*, *Valeriana officinalis*, *Vanilla planifolia*, *Veratrum viride*, *Verbascum thapsus*, *Viburnum prunifolium*, *Xanthorrhiza apiifolia*.

A Committee on Editing was appointed to consider the framing of certain rules in regard to the use of titles and academic degrees in connection with the names of members to be printed in the Proceedings and also to agree on common editorial forms. These rules are to be applied on all the publications of the A. Ph. A., and it was further recommended that outside associations appoint delegates to confer with this Committee in order that there may be unison in the general manner of editing pharmaceutical publications in this country. President Rusby appointed the fol-

lowing members on this Committee: H. F. Taylor, C. S. N. Hallberg, C. A. Mayo, F. B. Hays and Henry Kraemer.

William B. Day, Chairman of the Committee on Membership, recommended the appointment of an official delegate of the A. Ph. A. to each of the meetings of the various State Pharmaceutical Associations who is to be requested to be present at the opening meeting of each of the State Associations. This recommendation was adopted and ought to be a means of directing attention to the work of the A. Ph. A. and of increasing its membership and should besides receive the support of all the members of the various State pharmaceutical associations.

The following reports were also received: the Committee on Reorganization, C. S. N. Hallberg, Chairman; the Committee on Branches, C. A. Mayo, Chairman; the Committee on the William Procter, Jr., Monument Fund, John F. Hancock, Chairman; the Committee on Publicity, F. B. Hays, Chairman; the Committee on the Status of Pharmacy in the Army and Navy, George F. Payne, Chairman.

The Committee on National Formulary through its Chairman, C. Lewis Diehl, presented a report which indicated the progress of the work and showed close co-operation with the members of the medical profession and the Committee on Unofficial Standards of A. Ph. A. The Association voted to allow a sum not exceeding \$1000.00 for the use of the Committee in making a line of preparations which shall become the property of the Association and be of use for purposes of reference.

After the presentation of the report of the Committee on National Formulary it was moved by George M. Beringer that an honorarium of \$50 be voted M. I. Wilbert for the extra services which he voluntarily rendered as a member of the Committee by having mimeographed copies made of the various circular letters and committee reports. This motion was at first approved by the Association, but later Mr. Beringer asked to reconsider the action taken, as Mr. Wilbert stated that on account of his being a government employe he could not accept the honorarium. After some additional discussion it was suggested that a vote of thanks to Surgeon-General Wyman, for his willingness to co-operate in the perfecting of the U.S.P. and the N.F., would be the more appropriate method of showing the appreciation of the work done

in connection with the Public Health and Marine Hospital Service. A resolution of this nature was then passed unanimously.

The final session of the Association continued till nearly 7 o'clock on Saturday afternoon. It was announced that Mr. Ewen McIntyre had been elected Honorary President. The session was concluded with the installation of the following officers-elect for 1910-1911: President, Eugene G. Eberle; First Vice-President, William B. Day; Second Vice-President, Otto F. Clause; Third Vice-President, Leonard A. Seltzer; Treasurer, H. M. Whelpley; Reporter on Progress of Pharmacy, C. Lewis Diehl; and General Secretary, Charles Caspari, Jr.

With this was concluded a meeting which will always stand out in the recollection of the members on account of its pleasant associations and the accomplishment of a vast amount of work.

SECTIONAL MEETINGS.

Simultaneous sessions of the several sections continued throughout the meeting. The program for the Section on Scientific Papers as published in the May *Bulletin of the A. Ph. A.* was strictly adhered to, thus making it possible for those in attendance to know what was being done in at least this one section.

The *Scientific Section*, with M. I. Wilbert as Chairman, held six sessions during which about 50 original communications were read and discussed. The Chairman's address was devoted to a consideration of lines of investigation and of fields of inquiry which might well claim our attention as it relates to the "uplift movement" in pharmacy. It included a discussion of the following subjects: (a) the pharmacist and the public health, (b) lost opportunities, (c) the coming revision of the U.S.P. and (d) the coming era in pharmacy. The whole of one session was devoted to the consideration of the report of the A. Ph. A. Committee on the U. S. Pharmacopœia. Thirty-two recommendations were discussed and finally approved by the Association and several of them were finally incorporated in the "General Principles to be followed in Revising the Pharmacopœia" adopted by the U. S. Pharmacopœial Convention.

The symposium on Physiological Testing was one of the important events of the meeting. The papers and discussion were suggestive, inspiring and forceful. One of the results of this symposium was the appointment of a Committee on Physiologic

Assays by the Association to consist of experts whose duty it will be to coördinate the various methods of biological assays and to propose standard methods. President Rusby subsequently appointed, as members of this Committee: E. M. Houghton, Reid Hunt, H. C. Wood, Jr., R. A. Hatcher, Torald Sollmann and A. C. Crawford.

The Ebert Prize was awarded to H. M. Gordin for his papers of last year as well as his numerous scientific papers to the Association. The Committee on Drug Market, through the Chairman, E. L. Patch, presented a valuable report similar to those received by the Association for some years past. The officers-elect of the Scientific Section are Chairman, A. H. Clark; and Secretary, Wm. O. Richtmann.

The Section on Practical Pharmacy and Dispensing held three sessions. The Chairman, Mr. Otto Raubenheimer, in his address reminded the members of the rôle of eminent pharmacists, chemists, pharmacognosists and scientists who were born a hundred years ago and said that shortly there would be celebrated the centenary of the discovery of the most important alkaloids and that in about ten years the centenary of the oldest College of Pharmacy in the United States would also be celebrated. He also directed the attention of pharmacists to those studies and practices which would enable them to keep abreast of the times and to possess the necessary pharmaceutical knowledge which would assist them in doing their share for the protection of the patient.

One of the interesting sessions of this section was that devoted to a "symposium on the most important pharmacopœias of the world." While the greatest benefit must accrue to those who had an opportunity of seeing the pharmacopœias and examining them as well as participating in the discussions it would be indeed fortunate if the symposium of papers could be published as a separate pamphlet or at least together in one number of the *Bulletin of the A. Ph. A.* There were twenty-five papers presented, and one session was devoted entirely to a comparison of the most important groups of galenicals of the more important pharmacopœias with those of the U. S. Pharmacopœia and National Formulary, which was illustrated with specimens. The officers-elect of this section for the year 1910-11 are: Chairman, Carl Saalbach and Secretary, P. Henry Utech.

The Section on Education and Legislation held three sessions and as in the previous sections mentioned the interest was main-

tained up to the time for adjournment. The address of the Chairman, Charles H. LaWall was upon the subject of Education and Pharmacy and is published in full in the *American Druggist* for May 9, 1910, p. 288. Nearly twenty-five papers were presented in addition to which there was a joint session of the section with the National Association of Boards of Pharmacy and American Conference of Pharmaceutical Faculties.

The following officers of this section were elected for the ensuing year: Chairman, Charles W. Johnson; Secretary, W. J. Teeters; Associates, J. W. Sturmer, Philip Asher and J. C. Wallace.

The Historical Section held a single session with the Chairman, E. G. Eberle, in the chair. To the student of the Association and he who is the veteran in matters pharmaceutical these sessions are acknowledged to be to-day an essential part of the work of the Association. The papers of E. V. Howell on the pioneer botanists of the United States are always stimulating and refreshing. The letters of great pharmacists, the historical data relating to the Boards of Pharmacy and the State Pharmaceutical Associations, and the papers on historical subjects, which are pouring into the Association each year require that the Association very soon enter upon some plan for the erection of a permanent building where these documents may be conserved and made available to the members.

The Historian, Edward Kremers, presented a report in which he again recommended the creation of the office of Librarian and suggested "that the numerous officers of the Association file such portions of their correspondence and other documents, as might be of value, with the Historian, when they are through with this material." He also suggested that some steps be taken to secure the deposit and permanent care of the valuable documents that must have been accumulated by the chairmen of the several revision committees of the U. S. Pharmacopœia in some place where they will be generally available both to the medical and pharmaceutical professions. The officers-elect of the Historical Section for 1910-1911 are: Chairman, J. L. Lemberger; and Secretary, Otto Raubheimer.

The Commercial Section held two sessions with the Chairman Waldo M. Bowman presiding. The chairman's address dealt with the subject of the "Purification of Commercial Pharmacy," in which he directed attention to "the need of elevating the standards

of commercial practice in pharmacy and of purifying it of the evils that encompass it." Twelve papers were presented to the section and that some of these seemed to belong to one or the other of the other sections, furnishes an illustration of the difficulty in drawing the lines between the work of the several sections.

The following are the officers of the Commercial Section for the ensuing year: Chairman, F. M. Apple; Secretary, B. E. Pritchard; Associates, Sydney Yeomans and C. M. Ford.

The *Program of Entertainment* under the charge of the Local Secretary, T. A. Miller, included a luncheon at Lakeside Park; a reception, tendered the Association by His Excellency, Wm. H. Mann, at the Governor's mansion; a card party for the ladies at the Woman's Club, and many courtesies including special trips to historic points in and around the city of Richmond.

H. K.

PHILADELPHIA COLLEGE OF PHARMACY.

The eighty-ninth annual commencement of the Philadelphia College of Pharmacy was held in the American Academy of Music on Thursday evening, May 26. After prayer by Rev. Llewellyn N. Caley, the degrees were conferred by President Howard B. French.

The following are the names of those who received the degree of Doctor in Pharmacy (P.D.), together with the subjects:

<i>Name.</i>	<i>Thesis.</i>	<i>State or Country.</i>
Amsterdam, Peter,	Cassia Bark and Cinnamons (official)	Russia
Bartholomew, Samuel	The Volumetric Determination of	
Howard,	Sodium Borate,	Pennsylvania
Baun, William David,	Cinchona and its Bast Fibres,	Pennsylvania
Beck, Jay Dana,	A Simple Apparatus for the Recovery of Alcohol in the Retail Pharmacy,	Pennsylvania
Blumberg, Joseph,	Zinc Oxide,	Pennsylvania
Bolton, Stephen Dwight,	The Manufacture of Extract of Vanilla and its Importance in Pharmacy,	New York
Borneman, Warren		
Roland,	Potassii Bitartras,	Pennsylvania
Bose, Charles Henry,	Sambucus Canadensis,	Pennsylvania
Breen, James Stanley,	A Process for Determining the Value of Soap,	Pennsylvania

<i>Name.</i>	<i>Thesis.</i>	<i>State or Country.</i>
Bringman, Merle Stoles,	Blood and Tests for Blood,	Pennsylvania
Brooks, Jay William,	The A.O.A.C. Standards as applied to Belladonna,	New York
Butt, Luke Thomas,	Pepsin,	Pennsylvania
Chapman, George Fulmer,	Aqua Hydrogenii Dioxidi,	Pennsylvania
Connelly, Lester Cleveland,	The Advantages of the Compound Microscope in the Examination of Powdered Drugs,	Pennsylvania
Deck, Roy,	H ₂ O ₂ as sold by Druggists,	Pennsylvania
DeHaven, Henry Vernon,	Sandalwood,	Pennsylvania
Dilatash, Howard Curtis,	Phenol,	New Jersey
Driver, Walter,	A Quick Method for Filling Bottles,	Utah
Durbin, William Stacey,	Rhamnus Purshiana,	Pennsylvania
Eberly, Norman Elias,	Hydrastis,	Pennsylvania
Eby, Maurice Herr,	Prescription Difficulties,	Pennsylvania
Emlet, John Matthias,	Ferri Sulphas Exsiccatus,	Pennsylvania
Feinstein (Miss) Anna (P.C.),	Microscopical Examination of Powdered Rhubarb,	Russia
Gibney, Edward Paul,	Soluble Bismuth and Sodium Tartrate,	Pennsylvania
Goodwin, James Jeffries,	Assay of Ferrum Reductum,	Kentucky
Greenberg, Hyman,	Improved Method for Prepared Castor Oil,	Pennsylvania
Greene, William Robert,	Antiseptic Properties of Iron,	Pennsylvania
Greiner, Chloe Earl,	Liquor Potassii Hydroxidi,	Ohio
Griesener, Fred,	Liquor Sodæ Chlorinatae,	Pennsylvania
Grom, Roland Bismarck,	Evolution and Pharmacy,	New Jersey
Grove, Norbert Harrison,	Chromium Trioxide,	Pennsylvania
Guenther, Harold Dickinson,	Percentage Loss or Gain in Weight of U.S.P. Chemicals at Store Temperature,	Pennsylvania
Harris, William Clyde,	Arsenious Iodide,	Pennsylvania
Harting, Alfred Martin,	Solution Iron Peptonate with Manganese,	Maryland
Henkel, Joseph Victor,	Monohydrated Sodium Carbonate,	Pennsylvania
Henrie, Arthur Cecil,	Analytical Methods for the Pharmacist,	Pennsylvania
Hickory, Edward Calvin,	Toilet Creams of the Casein and Sodium Stearate Types,	Pennsylvania
Honsaker, Charles Coy,	Phenolphthalein,	Pennsylvania
Horn, Charles Lewis,	Liquor Ferri Iodidi N.F. 3d,	Pennsylvania

<i>Name.</i>	<i>Thesis.</i>	<i>State or Country.</i>
Hulick, George Bercaw,	Spiritus Ætheris Nitrosi,	Pennsylvania
Jones, Ellsworth R.,	Rhamnus Purshiana,	Pennsylvania
Kehr, Erney Cornelius,	Glycerite of the Phosphates of Iron, Quinine and Strychnine,	Pennsylvania
Keister, Vastine Atkin- son,	Bacterium Lactici Acidi,	Virginia
Keys, William Wallace,	Commercial Varieties of Rhubarb,	Pennsylvania
Kniley, Eugene Walker,	Sodii Sulphus,	Pennsylvania
Kooker, John Leedom,	Caffea,	Pennsylvania
Korb, Edward Michael,	Zinc Oxide,	Pennsylvania
Kramer, James,	Syrup of Ferrous Iodide,	Pennsylvania
Lamb, Sylvan Deering,	Magma Bismuthi,	Indiana
Lang, Charles Nicholas,	The Collection, Preparation and Preservation of a local Herbarium,	Pennsylvania
Laros, William Jonas,	Window Dressing and its Value,	Pennsylvania
Levan, George B.,	The Preservation of Vegetable Drugs,	Pennsylvania
Lounds, Albert Edward,	Permanency of Glycerophosphates,	Florida
Lounsbury, William At- kinson,	The Preservation of Syrup of Fer- rous Iodide,	New Jersey
Loveless, Earl Martin,	The Assay and Micro-Chemistry of Strophanthus,	Pennsylvania
McAninch, Harry El- mer,	Liquor Magnesii Citratis,	Pennsylvania
McCarty, Raymond Welles,	Pepsin,	Pennsylvania
McCutcheon, Thomas Edward,	Aloes, Identification, Adulteration and Tests,	Pennsylvania
McGonigal, John Aloy- sius,	History of Opium,	Pennsylvania
McMillen, Donald At- lee,	The Effect of Heat on the Alkaloidal Assay of Opium,	Pennsylvania
Mallas, Maurice Louis,	Collection of the Medicinal Barks of Commerce,	Pennsylvania
Marshall, Thomas Car- penter,	Elixir Digestivum Comp,	Pennsylvania
Metcalf, Elliott Harri- son,	Pancreatin,	Connecticut
Metzler, Robert,	Hepatica,	Pennsylvania
Mohn, Emory Shinkle.	Potassium Iodide and Potassium Bromide,	Pennsylvania
Morgan (Miss) Lula A. (P.C.),	Acidum Boricum,	Pennsylvania
Moser, Earl Spencer,	Sapo Mollis,	Pennsylvania
Mueller, Sister Bertha,	Digitalis,	Michigan

<i>Name.</i>	<i>Thesis.</i>	<i>State or Country.</i>
Mutty, Joseph Edwin,	Liquid Extract of China "Dutch,"	Maine
Naly (Miss) Sarah L. (Ph.G.),		
Owens, Evan Richard,	Microscopical Laboratory,	Pennsylvania
Pettyjohn, Harry Jack- son,	Viburnum Prunifolium,	Pennsylvania
Press, Henry William,	Colocynthis,	Delaware
	The Proper Time to Collect Roots and Rhizomes,	Pennsylvania
Raines, Edward William,		
	Bacteriological Examination of Gela- tin,	Illinois
Ritchey, George Edgar,	Kaolinum,	Pennsylvania
Ritchey, Jacob C. Leh- man,		
Rodes, Zebulon Harri- son,	Hydrastis Canadensis,	Pennsylvania
Roof, William George,	Ammonium Sulpho-Ichthyolate,	Pennsylvania
Rothenberger, Charles B.,	The Manufacture of Paper,	Pennsylvania
	The Cultivation of Hydrastis Cana- densis,	Pennsylvania
Ruch, Walter Edward,	The Utility of Pharmacognosy,	New Jersey
Russell, Percy Reginald,	Milk of Magnesia,	Pennsylvania
Scargle, William,	A Practical System of Discounts for Pharmacists,	Pennsylvania
Schabacker, Horace Martin,		
Schuehle, Christopher, Jr.,	Pepsinum,	Pennsylvania
Shelly, William Harri- son C.,	Seed Dispersal,	Pennsylvania
Solomon, Roscoe,	Phenolphthalein as a Cathartic,	Pennsylvania
Stratton, Ernest Ken- neth,	Phenol,	Pennsylvania
Topper, Louis LeRoy,	Casein	New Jersey
Treichler, Frank Albert,	Saccharum,	Pennsylvania
Turner, Walter William,	Sodium Benzoate,	Pennsylvania
Viner, Lewis,	Cannabis Indica,	Pennsylvania
Walton, John Carroll,	Glycerinum,	Russia
Webb, Paul Carleton Hill,	Essentia Pepsini,	Pennsylvania
	Notes on the Histology and Chemis- try of Tonquin Wood,	Pennsylvania
Webb, Walter Nardin,	Olive Oil,	S. Carolina
Werner, Karl,	Vanilla Flavoring Extracts,	Pennsylvania
Wiesner, Joseph Frank- lin,		
Willingmyre, Philip Shuster,	Potassii Bicarbonas,	Wisconsin
	The Effect of Heat on Opium,	Pennsylvania

<i>Name.</i>	<i>Thesis.</i>	<i>State or Country.</i>
Wilson, John Herbert,	Some Special Tests for Valuation of Anthemis,	Pennsylvania
Wilson, Lewis Elmer,	Fluid Glycerite of Krameria,	Maine
Wilson, Robert James,	Precipitated Manganese Dioxide,	Pennsylvania
Wolfe, Claude Senft,	Elixir Aromaticum,	Pennsylvania
Workman, Edward Benjamin,	Magnesium Oxide,	Pennsylvania
Zelmanoff, David Solomon,	Sulphur Iodide,	Russia
Ziegler, Frank Loomis,	Calcium Orthosilicate,	Pennsylvania
Ziegler, John Edwin,	Oleum Cinnamomi,	Pennsylvania

The following are the names of those who received the degree of Pharmaceutical Chemist (P. C.), together with the subjects of their theses:

<i>Name.</i>	<i>Thesis.</i>	<i>State or Country.</i>
Bost, William Dale,	Liquor Plumbi Subacetatis,	N. Carolina
Cadwallader, Wayne,	Ferri Carbonas Saccharatus,	Pennsylvania
Calvin, William Ray,	Liquor Potassii Arsenitis,	Pennsylvania
Cooper, William Benjamin,	The Value of Efficiency of Greaseless Creams,	Pennsylvania
Costello (Miss), Mary O'Dea,	The Anatomy of Cactus,	Pennsylvania
Ferry (Miss), Fanny,	The Size of Globules in Various Emulsions,	Pennsylvania
Fleisher, Lewis,	Cork,	Pennsylvania
Henry, Carl Racine,	Liquor Sodii Phosphatis Compositus,	New York
Klopp, Wallace Ellwood,	The Commercial Varieties of Vanilla,	Pennsylvania
Lengel, James Petri,	Rhubarb,	Pennsylvania
Powell (Miss), Mary G.,	The Morphology of the Glandular Hairs of Humulus,	Pennsylvania
Sankey, Foster John,	Ammonia,	Pennsylvania
Schmidt (Miss), Selma L.,	The Testing of Balsam of Peru,	Ohio
Severa, Lumir,	Liquor Chlori Compositus,	Iowa
Siegel, Philip,	Precipitates in Alkaloidal Tinctures,	Colorado

The following were awarded certificates in the Pure Food and Drug Course: Harmon M. Sechler, Pennsylvania; and Ralph Thomas Ulrich, P.D., Pennsylvania.

There were 122 candidates for the degree *in course*, coming from the various States and countries as follows: Colorado, 1;

Connecticut, 1; Delaware, 1; Florida, 1; Illinois, 1; Indiana, 1; Iowa, 1; Kentucky, 1; Maine, 2; Maryland, 1; Michigan, 1; New Jersey, 5; New York, 3; North Carolina, 1; Ohio, 2; Pennsylvania, 91; Russia, 4; South Carolina, 1; Utah, 1; Virginia, 1; and Wisconsin, 1.

A brief but trenchant address to the graduating class was delivered by His Excellency, Hon. Edwin S. Stuart, Governor of Pennsylvania, in which he considered "Some of the Qualities that make for Success," dwelling particularly upon the importance of industry, perseverance, and integrity.

AWARD OF PRIZES.

The following students received the grade of distinguished: Sister Bertha Mueller and Walter E. Ruch. The grade of meritorious was attained by John A. McGonigal, Mary G. Powell, Zebulon H. Rodes and John E. Ziegler.

THE PROCTOR PRIZE, a gold medal and certificate, for the highest general average of the class with a meritorious thesis, was awarded to Sister Bertha Mueller, the presentation being made by President French.

THE WILLIAM B. WEBB MEMORIAL PRIZE, a gold medal and certificate offered for the highest general average in the branches of committee, operative pharmacy and specimens, was awarded to Sister Bertha Mueller, the presentation being made by W. L. Cliffe. The following graduates received honorable mention in connection therewith: John A. McGonigal and Zebulon H. Rodes.

THE MATERIA MEDICA PRIZE, \$25, offered by Prof. Clement B. Lowe, for the best examination in materia medica and in the recognition of materia medica specimens with a meritorious thesis, was awarded to Sister Bertha Mueller. The following graduates received honorable mention in connection therewith: Jay D. Beck, William R. Calvin, Lester C. Connelly, Charles L. Horn, Thomas E. McCutcheon, John A. McGonigal, Elliott H. Metcalf, Henry W. Press, Zebulon H. Rodes, Walter E. Ruch, Robert J. Wilson and John E. Ziegler.

THE MICROSCOPICAL RESEARCH PRIZE, a Zentmayer microscope, offered by Prof. Henry Kraemer, for the most meritorious thesis involving original microscopic work, was awarded to Sister Bertha Mueller. The following graduates received honorable mention in

connection therewith: Peter Amsterdam, William D. Baun, Jay W. Brooks, Norman E. Eberly, Vastine A. Keister, Wallace E. Klopp, Earl M. Loveless, Mary G. Powell, Edward W. Raines and Paul C. H. Webb.

THE ANALYTICAL CHEMISTRY PRIZE, \$25, offered by Prof. Frank X. Moerk, for the best work in qualitative and quantitative analysis, was awarded to Norman Elias Eberly. The following graduates received honorable mention in connection therewith: James J. Goodwin, Sister Bertha Mueller, Zebulon H. Rodas and Walter E. Ruch.

THE OPERATIVE PHARMACY PRIZE, \$20 in gold, offered by Prof. Joseph P. Remington, for the best examination in operative pharmacy, was awarded to Thomas Edward McCutcheon. The following graduates received honorable mention in connection therewith: Roy Deck, Arthur C. Henrie, John A. McGonigal, Sister Bertha Mueller, Joseph E. Mutty, Foster J. Sankey and Christopher Schuehle, Jr.

THE MAISCH PHARMACOGNOSY PRIZE, \$20 in gold, established by the late Jacob H. Redsecker, of Lebanon, Pa., and continued as a memorial by his nephew, Jacob Redsecker Beetem, for his-
tological knowledge of drugs, was awarded to Sister Bertha Mueller, the presentation being made by J. L. Lemberger. The following graduates received honorable mention in connection therewith: William R. Calvin, Charles L. Horn, Thomas E. McCutcheon, John A. McGonigal, Walter E. Ruch and John E. Ziegler.

THE MAISCH BOTANY PRIZE, \$20, offered by Mr. Joseph Jacobs, of Atlanta, Ga., for the best herbarium collection of plants, was awarded to Charles Nicholas Lang, the presentation being made by E. L. Newcomb. The following graduate received honorable mention in connection therewith: George B. Levan.

THE THEORETICAL PHARMACY PRIZE, a Troemner Agate Prescription Balance, established by the late Mahlon N. Kline, for the best examination in theory and practice of pharmacy, was awarded to John Aloysius McGonigal, the presentation being made by his son, C. Mahlon Kline. The following graduates received honorable mention in connection therewith: Peter Amsterdam, Sister Bertha Mueller and Mary G. Powell.

THE COMMERCIAL TRAINING PRIZE, \$20 in gold, offered by Prof. Joseph P. Remington to the graduate who passed the best examination in commercial training at the final examination for

the degree, was awarded to Walter Ruch, the presentation being made by E. Fullerton Cook. The following graduates received honorable mention in connection therewith: Jay D. Beck, Jay W. Brooks, Wayne Cadawallader, William R. Calvin, Roy Deck, Walter Driver, John M. Emlet, Fred Griesemer, Norbet H. Grove, Alfred M. Harting, Edwin C. Hickory, Charles L. Horn, Wallace E. Klopp, Thomas E. McCutcheon, Sister Bertha Mueller, Joseph E. Mutty, Harry J. Pettyjohn, Mary G. Powell, Lumir Severa, Frank L. Ziegler and John E. Ziegler.

THE INSTRUCTORS' PRIZE, \$20, offered by the Instructors of the College for the highest term average in the branches of pharmacy, chemistry and materia medica, was awarded to Walter E. Ruch, the presentation being made by F. P. Stroup. The following graduates received honorable mention in connection therewith: Jay W. Brooks, William R. Calvin, John M. Emlet, James J. Goodwin, Charles L. Horn, George B. Levan, John A. McGonigal, Maurice L. Mallas, Sister Bertha Mueller, Henry W. Press, Zebulon H. Rodes, Christopher Schuehle, Jr., Frank L. Ziegler and John E. Ziegler.

THE PHARMACY QUIZ PRIZE, one year's membership in the American Pharmaceutical Association, offered by Prof. Charles H. LaWall for the best term work in theory and practice of pharmacy, was awarded to Walter Ruch. The following graduates received honorable mention in connection therewith: George B. Levan and Zebulon H. Rodes.

THE KAPPA PSI FRATERNITY PRIZE, a gold medal, offered by the Eta Chapter of the Kappa Psi Fraternity to the graduate making the highest general average during his or her senior year at the College, was awarded to Sister Bertha Mueller, the presentation being made by Professor Remington. The following graduates received honorable mention in connection therewith: John A. McGonigal, Mary G. Powell, Zebulon H. Rodes, Walter E. Ruch and John E. Ziegler.

THE ATHLETIC PRIZE, a silver loving cup, offered by Henry S. Godshall, P.D., and John J. Bridgeman, P.D., to the member of the graduating class who, at commencement, stands with the greatest number of points in athletics to his credit and has obtained the highest general average amongst those participating in athletics at the College, was awarded to Evan Richard Owens, the presentation being made by Dr. R. Tait McKenzie,

Director of Physical Education in the University of Pennsylvania. The following graduate received honorable mention in connection therewith: John M. Emlet.

COMPLIMENTARY SUPPER.

A complimentary supper to the graduating class was given by the Faculty on Wednesday evening, May 25. In addition to the toast by the members of the Faculty and Instructors, brief responses were made by some 30 members of the graduating class representing different sections of the United States and foreign countries.

BACCALAUREATE SERMON.

The baccalaureate sermon was preached by the Rev. David M. Steele in the Church of St. Luke and the Epiphany on Sunday, May 22, at four o'clock.

BANQUET.

A banquet was tendered the alumni of the Philadelphia College of Pharmacy who were recently selected members of the General Committee of Revision of the U. S. Pharmacopoeia at the Union League following the graduation exercises on Thursday evening, May 26. President Howard B. French presided, and among the invited guests was Governor Edwin S. Stuart.

ALUMNI ASSOCIATION.

The Alumni Association held its forty-sixth annual meeting on Monday, May 23. The annual banquet was held on Tuesday evening, May 24, at the Hotel Walton and was attended by nearly 250 members and invited guests. The details of the events of the Alumni Association will be published in the *Alumni Report*.

PROCEEDINGS OF THE ELEVENTH ANNUAL MEETING OF THE AMERICAN CONFERENCE OF PHAR- MACEUTICAL FACULTIES HELD AT RICHMOND, VIRGINIA.

Twenty-six colleges of pharmacy were represented by delegates at this the eleventh annual meeting held May 2-7, 1910. On account of the death of the president of the Conference, Wm.

M. Searby, the vice-president, E. H. La Pierre, presided at the meetings.

The vice-president in his address called particular attention to the growth of the Conference from seventeen schools at its organization in 1900 at Richmond, Va., to thirty-three schools now holding membership.

The report of the chairman of the executive committee showed that the Conference was doing much toward assisting in raising the standards of pharmaceutical education.

The pharmaceutical syllabus was carefully considered and the Conference voted to approve its general scope and purposes. The following were elected to represent the Conference on the general syllabus committee: J. H. Beal, H. H. Rusby, J. O. Schlotterbeck, J. A. Koch, W. C. Anderson, C. B. Lowe, and H. V. Army.

The by-laws of the constitution were amended so as to provide that one year of high-school shall be the minimum requirement for entrance to all schools holding membership in the Conference.

Prof. J. T. McGill, of Vanderbilt University, read a paper on "The High School in the Southern States." The aim of Professor McGill's paper was to show that the southern states had ample high-school facilities to prepare students to meet the minimum requirement of one year's high-school work.

The following persons were elected as officers of the Conference for the year 1910-1911: President, J. O. Schlotterbeck, University of Michigan, Ann Arbor; Vice-President, W. J. Teeters, State University of Iowa, Iowa City; Secretary-Treasurer, Charles W. Johnson, University of Washington, Seattle; Executive Committee: Chairman, J. A. Koch, Pittsburg College of Pharmacy, Pittsburg; F. P. Stroup, Philadelphia College of Pharmacy, Philadelphia; E. G. Eberle, Baylor University, College of Pharmacy, Dallas, Texas; E. H. La Pierre, Massachusetts College of Pharmacy, Boston; J. M. Good, St. Louis College of Pharmacy, St. Louis.

NEW ESSENTIAL OILS.*

Oil of Cinnamomum Tamala.—Besides other low-grade *Cinnamomum*-species, it is especially *Cinnamomum Tamala* (Nees et Eberm.), a tree of medium size, growing plentifully in Southern Asia, which yields "Mutterzimt," *Cassia Ligneae*, or Woodcassia,

*From Semi-Annual Report of Schimmel & Co., April, 1910, pp. 122-124.

termed by the retail trade simply *Cassia*. The leaves of the tree are still used medicinally in the East Indies; in former years they were also met with in commerce (the narrow *Folia Malabathri*) but they are now obsolete. The leaves contain an essential oil of which we recently received a sample, which had been distilled by Mr. I. H. Burkill, of Calcutta. The oil was of a lemon-yellow colour, and had a clovelike, at the same time slightly peppery, odour. It possessed the following constants: d_{15}° 1,0257, $^{\circ}D + 16^{\circ} 37'$, $^{\circ}D_{20}^{\circ}$ 1,52596; phenol-content 78 per cent., soluble in 1,2 volumes and over of 70 per cent. alcohol. The phenols consisted of eugenol (m. p. of the benzoyl compound 69°). When freed from phenols, the oil had the high optical rotation $^{\circ}D + 66^{\circ} 40'$ and yielded a solid nitrite which, when recrystallised from ethyl acetate melted at 113 to 114° . It contained therefore *d- α -phellandrene*. In respect of its high eugenol content it is closely allied to the ordinary oil from Ceylon cinnamon leaves.

Oil of Mentha silvestris.—An oil of *Mentha silvestris* L., prepared in Cyprus, was found to possess the following properties: d_{15}° 0,9701, $^{\circ}D + 31^{\circ} 30'$, $^{\circ}D_{20}^{\circ}$ 1,49544, acid no. 2,4, ester no. 20,9, ester no. after acetyl. 171,4, soluble in 3 vols. of 70 per cent. alcohol; (the diluted solution showed slight opalescence;) faintly mint-like odour; yellow colour. It is obvious that the saponification number of 171,4 after acetylation of the oil cannot in this case be indicative of the menthol content, which, judging by this factor, should have been 54,8 per cent.; for as a matter of fact the sample contained but little menthol. The mint-like odour was chiefly due to the presence of pulegone, of which the oil contained 40 per cent. (isolated with neutral sulphite of sodium). In addition to this a phenol (probably carvacrol) could be detected, from which it is to be supposed that this, also, would become esterified and would help to swell the acetylation value. Owing to the simultaneous occurrence in it of menthol, pulegone and a phenol, the oil cannot be used either as peppermint oil or as European pennyroyal or origanum oil. It is differentiated from oil of peppermint by its much higher specific gravity and by its pronounced dextrorotatory power. We received the sample from the Imperial Institute in London.